First Alert®

REMOTE ACCESS

VIDEO SECURITY SYSTEM

USER'S MANUAL

Model

DCAD4205-480M

First Alert®

Welcome

Thank you for choosing First Alert for your security needs!

For more than half a century, First Alert has made the home-safety and security products that make your job easier. Our products are built to the highest standard which has earned us a leadership role in the home-safety and security product categories. We are committed to serving our customers, from the professionals who install our products, to the families and businesses who count on them. First Alert has been helping families and businesses stay safe for over 50 years. By having a First Alert Security System, you're taking the first step in protecting your home or business from damage or theft. We're watching, even when you're not.

This manual is written for the DCAD4205-480M DVR. It was accurate at the time it was completed. However, because of our ongoing effort to constantly improve our products, additional features and functions may have been added since that time and on-screen displays may change. We encourage you to visit our website at www.firstalert.com or www.brkelectronics.com to check for the latest manuals (English and Spanish), firmware updates, downloads, other security camera products and announcements. You'll find this product line under Home Security →→ Security Cameras →→Wired Cameras.

© 2014 BRK Brands, Inc. All rights reserved. Distributed by BRK Brands, Inc., Aurora, Illinois 60504. BRK Brands, Inc. is a subsidiary of Jarden Corporation (NYSE: JAH). First Alert® and SmartBridge™ are registered trademarks of the First Alert Trust. Due to continuing product development, the product inside the packaging may look slightly different than the one on the package. To obtain warranty service, contact the Consumer Affairs Division at 1-800-323-9005, Monday through Friday, 7:30 a.m. - 5 p.m., Central Standard Time.
Made in China

Main Description

Four, eight or sixteen channel H.264 digital video recorder with Internet remote surveillance and motion detection suitable for applications such as high-end residential - new or remodel, light commercial, small business/retail, small warehouse or small grocery

Product Features

- **Auto IP connection capability**
- **H.264 Compression**
- **Virus free Linux O/S**
- **Record, playback, mobile phone live view, backup, control, & remote access**
- **500 GB hard drive installed**
- **Supports smart phone live view**
- **User-friendly interface: DVR capable of providing 16 bit true color, semi-transparent GUI with notes for selected menu items.**
- **Advanced motion detection activated recording**
- **24/7 Scheduled Recording**
- **Network monitoring through internet access**
- **Supports USB or external DVD backup**
- **Hi-speed backup/upgrade/record via USB2.0**
- **HDMI Video Out**

INTRODUCTION
TABLE OF CONTENTS

Section	Description	Page #
1	**Introduction**	**2-3**
2	**Safety**	**6**
3	**Product Overview**	**7**
	What is in the Box	**7**
	DVR Controls	**8-10**
	Back Panel	**8**
	Camera Specifications	**9**
	Mouse and Virtual Keypad	**10**
	Camera Power Connections	**11**
4	**Initial Setup - System Operation**	**12**
	System Setup Menu	**13**
	Search Menu	**14**
	Configuration Menu	**15**
	Record Menu	**16**
	Network Menu	**17-18**
	Alarm Menu	**19**
	Account Menu	**20**
	Abnormality Menu	**21**
	Storage Menu	**22**
	Backup Menu	**23**
	Output Menu	**24**
	Display Menu	**25**
	Log Menu	**26**
	Default and BPS Menu	**27**
	Auto Maintain Menu and Online Users Menu	**28**
	Shutdown Menu	**29**
	USB Firmware Upgrade	**29**
6	**Remote Access**	**30**
	Smartphone Apps	**30-31**
	V-show web setup	**31-35**
	IMS 200 PC Software Setup	**36-56**
	Camera Settings	**57**
	V-Show Port Forwarding Setup	**58-61**
	Network Setup	**62-64**

Section	Description	Page #
8	**Appendix**	**65**
	Hard Drive Removal and Installation	**65**
	Specifications	**66**
	FAQ's (Frequently Asked Questions)	**67**
	Troubleshooting	**68**
	Warranty	**69**

SAFETY
CAUTION STATEMENTS

Safety Precautions

- Do not drop, puncture, or disassemble the cameras or DVR.
- Do not tug on the power adapter. Use the plug to remove it from the wall.
- Do not expose the cameras or DVR to high temperatures.
- For your own safety, avoid using the DVR when there is a storm or lightning in your area.
- Use the cameras and DVR with care. Avoid pressing hard on the cameras or DVR body.
- Do not use power cable if it is damaged or crushed.

Safety Precautions

Instructions for Use

- Always purchase the correct size and grade of battery most suitable for the intended use.
- Replace all batteries of a set at the same time.
- Clean the battery contacts and also those of the device prior to battery installation.
- Ensure the batteries are installed correctly with regard to polarity (+ and -).
- Remove batteries from equipment that is not to be used for an extended period of time.
- Remove used batteries promptly.

FCC Compliance

FCC Compliance Class B Digital Device
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that the interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that of the receiver.
- Consult the dealer or an experienced radio or TV technician for help.

Notice: Only peripherals complying with FCC class B limits may be attached to this equipment. Operation with non-compliant peripherals or peripherals not recommended by First Alert / BRK Brands, Inc. is likely to result in interference to radio and TV reception. Changes or modifications to the product, not expressly approved by First Alert / BRK Brands, Inc., could void the user's authority to operate the equipment.

Important: The information shown in the FCC Declaration of Conformity paragraph below is a requirement of the FCC and is intended to supply you with information regarding the FCC approval of this device. The phone number listed below is for FCC related questions only and not intended for questions regarding the connection or operation for this device.

FCC Declaration of Conformity for devices with the FCC logo. Responsible Party: First Alert / BRK Brands, Inc., 3901 Liberty Street Rd., Aurora, IL. 60504-8122 Telephone: (630) 851 - 7330. Product / Model: DVRADM04. We, First Alert / BRK Brands, Inc. declare under our sole responsibility that the device to which this declaration relates: Complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC Certification (if applicable)
This device contains a radio transmitter. Accordingly, it has been certified as compliant with 47 CFR Part 15 of the FCC Rules for intentional radiators. Products that contain a radio transmitter are labeled with an FCC ID.

Fire and Electric Shock Hazard Statement

CAUTION

RISK OF ELECTRIC SHOCK

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK. UNPLUG ALL POWER SOURCES, INCLUDING CAMERAS FROM THE DVR BEFORE REMOVING COVER. FAILURE TO DO SO CAN RESULT IN DAMAGE TO THE DVR OR ITS COMPONENTS AS WELL AS INJURY OR DEATH.

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of un-insulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock.

The exclamation point within an equilateral triangle, is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS DVR UNIT TO RAIN OR MOISTURE

CAUTION: TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF THE PLUG TO THE WIDE SLOT AND FULLY INSERT

Caution!
When working with electrostatic sensitive devices such as hard disk or DVR unit, make sure you use a static-free workstation. Any electrostatic energy coming in contact with the hard disk or DVR can damage it permanently.

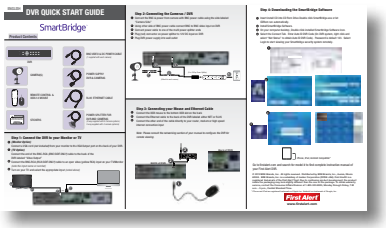
Disposal

These symbols indicate that it is prohibited to dispose of these batteries in the household waste. Take spent batteries that can no longer be charged to the designated collection points in your community.

What's in the Box*

H.264 4 channel Digital DVR
with 500 GB

DCAD4205-480M



Quick Install Guide

Installation
Software

RJ45 Ethernet Cable

3 Window
Warning Decals

60' BNC Video &DC Power Cables
(One for each camera. Varies with kits depending
on number of cameras included.)

5-way splitter

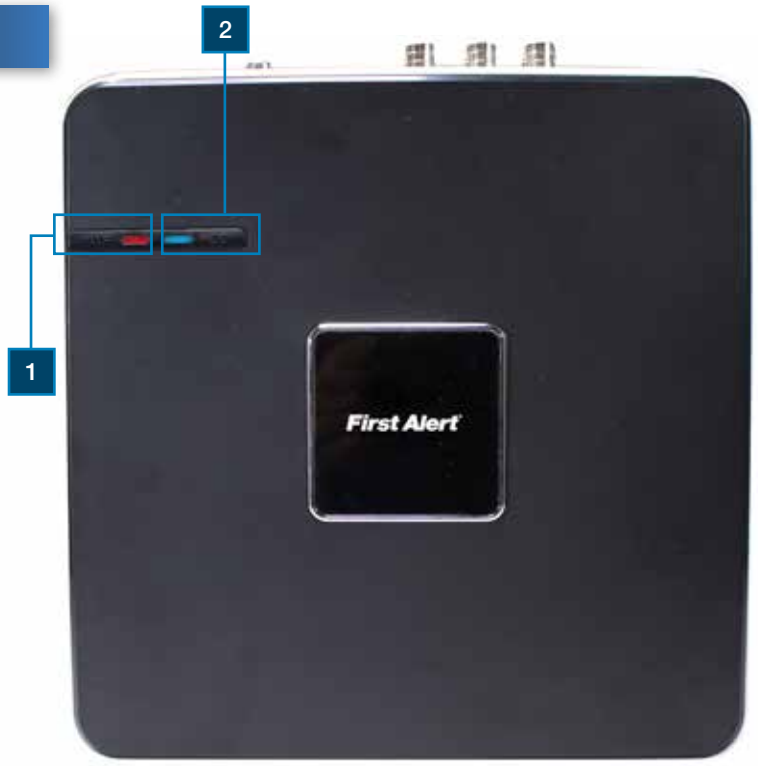
Power Supply
for DVR

USB 2.0 Mouse

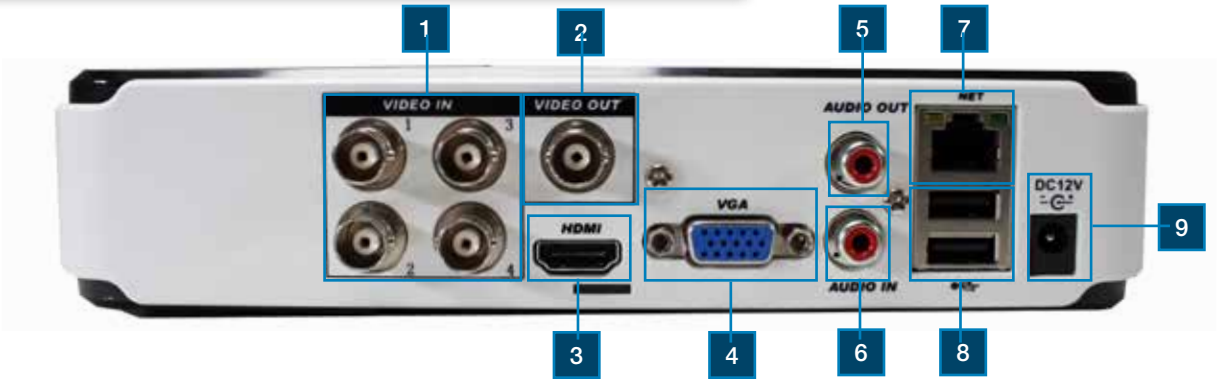
PRODUCT OVERVIEW
DVR CONTROLS

Top Panel

Item	Function	Description
1	Power LED	Indicates power status of DVR
2	HDD LED	Indicates status of DVR's Hard Drive



Back Panel



Item	Function	Description
1	Video In	4 video inputs
2	BNC Video Out	For connecting to a monitor
3	HDMI Output	For connecting to HDMI monitor
4	VGA Output	For connecting to VGA monitor
5	RCA Audio Out	For connecting to a speaker or amplifier
6	RCA Audio Input	For connecting audio signal from audio capable cameras or self powered microphones (RCA jacks)
7	Network	For connecting RJ45 ethernet cable to PC or router
8	USB/Mouse	Use Upper USB port for mouse connection; Use Lower USB port for USB flashdrive or backup
9	Power Supply	For connection to power cord +12V DC

Camera Specifications

480M	C1030DP5
Image Sensor	1/3” Color CMOS
EFFECTIVE PIXELS	648(H) X 488(V)
HORIZONTAL RESOLUTION	520TVL
IP RATING	IP66
NET	For connecting RJ45 ethernet cable to PC or router
NUMBER OF INFRARED LED’S	24
NIGHT-VISION RANGE	UP TO 50 FEET
INFRARED WAVE LENGHT	940nm
IR CUT FILTER	NO
INDOOR/OUT-DOOR	BOTH
SIGNAL SYSTEM	NTSC/PAL
LENS	6mm
ANGLE OF VISION	35-40º
FRAME RATE	NTSC: 60 FIELDS/SEC; PAL: 50 FIELDS/SEC
MINIMUM IL-LUMINANCE	0 LUX (IR ON)
AUDIO	NO
GAIN CONTROL	AUTO
SIGNAL TO NOISE RATIO	>48dB (AGC OFF)
GAMMA CHAR-ACTERISTICS	0.45
SHUTTER SPEED	1/50 (1/60) ~ 1/100000
VIDEO OUTPUT	1.0 Vp-p 75 OHM
POWER SUPPLY REQUIREMENTS	12VDC 180±10mA (IR ON)
OPERATING TEM-PERATURE	-22F ~ +122F (-30C ~ +50C)
CAMERA/STAND DIMENSIONS AT 900	W 58mm x H 77mm x L 119mm

PRODUCT OVERVIEW
MOUSE AND VIRTUAL KEYPAD

Mouse Controls

Mouse Operation with this DVR

The mouse is the primary input device for navigating system menus.
NOTE: Unless otherwise noted, all system functions described in this manual are achieved through mouse input.

To use a mouse with the system:
Connect a USB mouse to the USB MOUSE port on back panel of the system.
NOTE: Only the USB 2.0 port on the back panel (Upper USB port) is designed for data backup to a USB flash drive. Do not connect a USB flash drive to the USB MOUSE port. (Lower USB port)

Use the mouse buttons to perform the following:

REAR of DVR
Connect Mouse &
USB Drive
(8 & 16 Channel Shown, 4 Channel Similiar)

1 Left-Button:

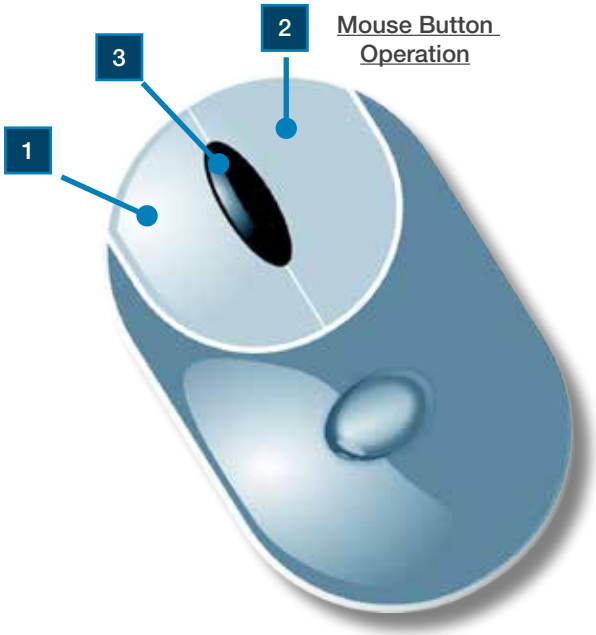
- Click to select a menu option
- During live viewing in split-screen double-click on a channel to view the selected channel in full-screen
- Double-click the channel again to return to split-screen view
- Selecting letter or number on the virtual keypad

2 Right-Button:

- Click to open the Quick Access Menu
- Exits any window
- Exits any menu or re-opens previous menu

3 Scroll-Wheel:

- No function



Virtual Keypad

Virtual Keypad

To enter text or numerical data, the system uses a virtual keypad. In fields where letters or numbers can be entered, you can switch between various formats – numbers, upper case (ABC) and lower case (abc). Note you can access all numbers when in the "Letters" virtual keypads. See below.

Numbers

Letters

Installing Cameras

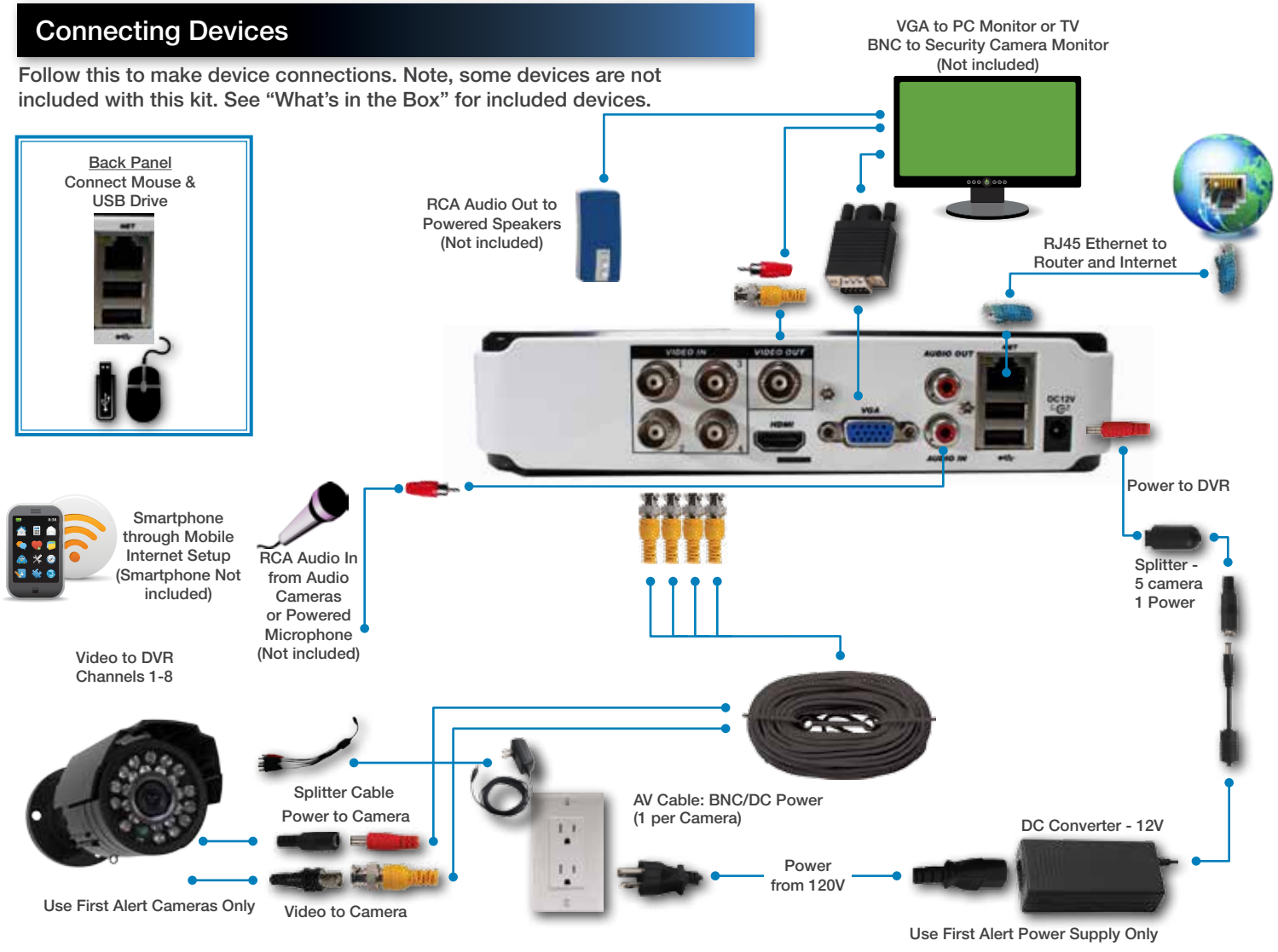
Installing Cable-Safe Mounting Bracket

Decide if the camera is to be wall or ceiling mounted and if cable will be fed through mounting surface hidden directly behind the bracket or fed through the side of the bracket so cable is exposed. Mark area where you will drill your hole. The Cable-Safe Mounting Bracket has three Adjusting Points. 1) Rotates Bracket 360° relative to mounting surface, 2) Adjusts bracket hinge 180° and 3) Rotates camera body 360° to level image.

Step 1: Select the position for the camera and drill your hole for the cable. Feed cable through mounting surface. Mount bracket to surface.
Step 2: Aim camera at target and using Adjusting Points 1 and 2 in tandem position camera. Tighten Ring and Thumb Screw.
Step 3: Rotate camera body using Adjusting Point 3 to the proper view angle making sure the Camera Shield is always on top and parallel to the ground so the image is level in the Live View Screen. See "Camera Orientation" Info box. Tighten screw.
Step 4: Attach proper length of cable and run from camera to DVR location. Note: Power cable ends are different. Be sure the correct power connector end matches "To Camera" or "To DVR". Tip - Connect cable at camera end before running cable to verify orientation is correct. Also, see Information box on "Longer Cable Runs".
Step 5: Check camera orientation via the Live View screen. Adjust as required.

Connecting Devices

Follow this to make device connections. Note, some devices are not included with this kit. See "What's in the Box" for included devices.


VGA to PC Monitor or TV
BNC to Security Camera Monitor
(Not included)
Back Panel
Connect Mouse & USB Drive
RCA Audio Out to Powered Speakers (Not included)
RJ45 Ethernet to Router and Internet
Power to DVR
Splitter - 5 camera 1 Power
Smartphone through Mobile Internet Setup (Smartphone Not included)
RCA Audio In from Audio Cameras or Powered Microphone (Not included)
Video to DVR Channels 1-8
Splitter Cable
Power to Camera
Video to Camera
Use First Alert Cameras Only
AV Cable: BNC/DC Power (1 per Camera)
Power from 120V
DC Converter - 12V
Use First Alert Power Supply Only

Powering your DVR and Cameras

The power supply included with the DVR is rated for 5 amps. Normally, this is enough to power both the DVR and supplied cameras. However, using aftermarket cameras or a larger number of cameras may surpass the capability of the power supply, causing the systerm to shut down. Most devices should be marked with the Amperage rating, but some may be marked by wattage. In this case, Amp usage can be found by dividing Watts by Volts, or A=W/V. The power supply should be upgraded if it surpasses 80% of its rating (i.e., 4 amps for a 5 amp power supply), to compensate for momentary spikes in current draw. Note: One Amp equals 1000 milliamps

System Start Up

Power On/Off

To power the system On/Off, connect the power cable to the DC 12V port on the rear panel. Press the toggle switch to the on position in the back of the DVR. At startup, the system performs a basic system check and runs an initial loading sequence. After a few moments, the system loads a live display view.

User Login Menu

NOTE: Powering down stops the system. The power LED is still on. The only way to fully power down the system is by turning the power off & on with the power switch on the back of the DVR. If no power switch is present, remove the power cord from power outlet.

User Login

Password

ATTENTION: By default, passwords are “123456” on the system. For security purposes, it is highly recommended to change passwords on the system using the Configuration Menu. See “Password” section for details on setting up passwords. Right click and select Login.

Main Viewing Screen

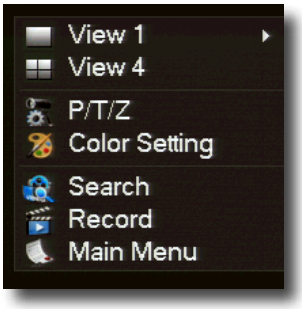
Main Menu

Right Click Menu

Clicking the right button of the mouse will launch a drop down menu. This menu will allow you to access the view display settings, adjust PTZ cameras, and screen settings. It will also allow acess to the recordings on the hard-drive and main menu to access other settings

When using the mouse, use the Right Click Menu to access several system options, including the System Setup Menu. Select one of the following options:

- **View Layout:** Provides a choice of viewing channels on the monitor
  - **View 1:** Allows viewing of 1 channel
  - **View 4:** Allows viewing of 4 channels
- **Color Setting:** Adjust video image settings by channel
- **Search:** Open the Search Menu and playback recorded video
- **Record:** Access to manual recording settings for each channel
- **Main Menu:** Opens the main system menu



Each camera channel can be adjusted individually for brightness, contrast, hue, sharpness and saturation. To adjust:

1. **Channel:** Select the proper channel for adjustment using the Channel drop down.
2. **Brightness, Contrast & Saturation** may be adjusted by placing and clicking the mouse cursor with the appropriate rectangle. Finer adjustments can be made by clicking the + and - squares.
3. Repeat process for all channels as desired. Or click DEFAULT, to return video to the original factory settings.
4. Click SAVE.

Main Menu

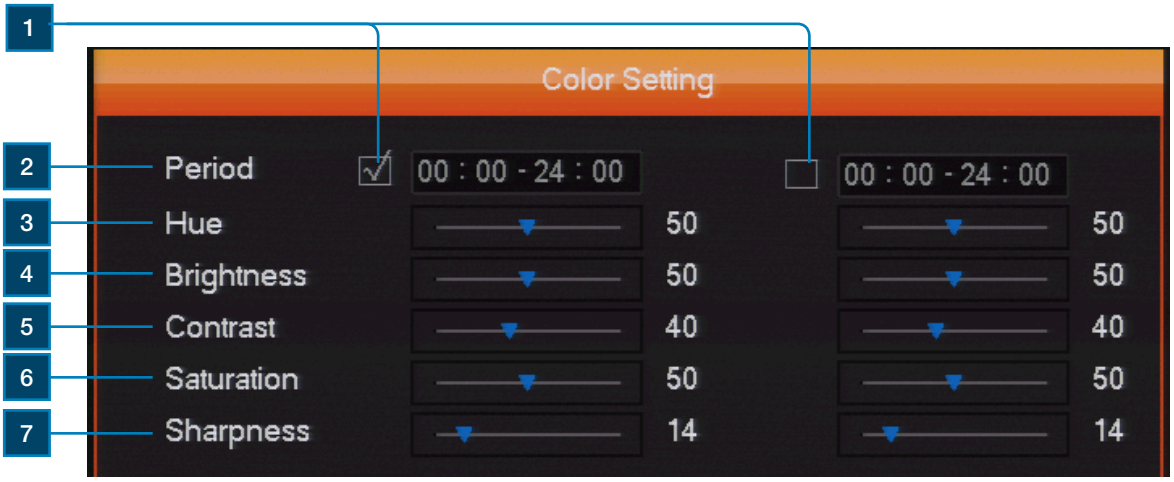
The main menu allows access to six sub-menus: Search , Configuration, Storage, Output, Maintain and Shutdown. Left click the associated icons and the sub-menu will launch. Right click will to escape out of the sub-menu.

1. **Search**
   Search records by type, channel, time and playback.
2. **Configuration**
   Configure recording, motion detection, abnormalities, alarm, system, network and user management settings.
3. **Storage**
   Hard disk and back up management
4. **Output**
   Configure out serial and output modes.
5. **Maintain**
   Display the system log information, version information, stream statistics, and
   online Users. You can also reset to factory defaults or use the automatic maintenance function
6. **Shutdown**
   Log off the User menu, turns off the machine, restarts the system, and switches Users and all other operations.

Color Setting

The Color Setting menu adjusts a specified channel's (single screen) image color, hue, brightness, contrast, and saturation parameters. Set it for two time periods according to the local times between day and night. For each adjustment, the device will automatically switch to the best video quality.

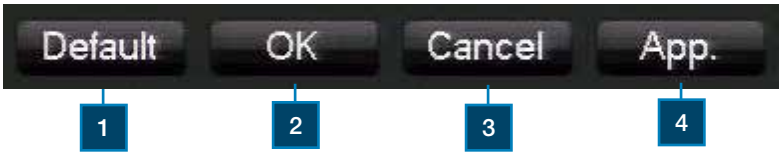
1. **Period**
   Two time periods can be set to match the ambient light during day or night. This option will automatically switch the color configuration at the set time. Check each box to enable this function at the specified time
2. **Hue**
   Adjust the screen image color.
3. **Brightness**
   Adjust the screen image brightness. It decreases/increases the brightness of the screen image to make the image clearer.
4. **Contrast**
   Adjust the black and white levels, the greater the ratio, the brighter the image.
5. **Saturation**
   Adjust screen image color purity. The greater the value, the cleaner the screen image appears.
6. **Sharpness**
   Adjust the sharpness of the screen image, a higher number will be a sharper image



Menu Buttons

The buttons below will typically appear on menus. Specific buttons will have their function explained with the corresponding menus options:

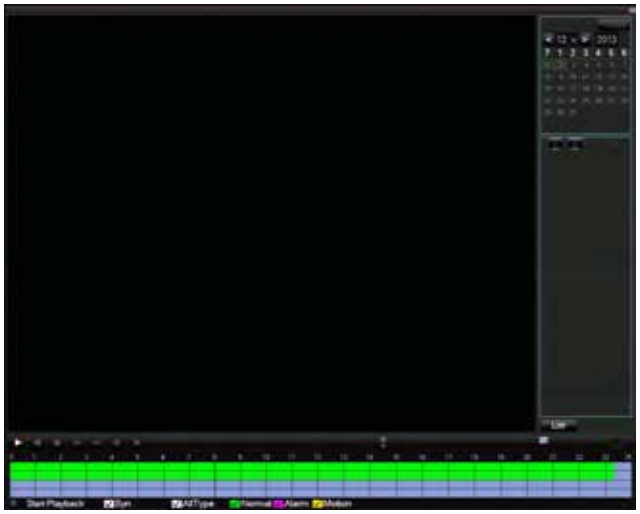
1. **Default:** Apply default settings
2. **OK:** Apply settings and exit menu
3. **Cancel:** Exit menu without applying changes
4. **App.:** Apply changes without exiting menu

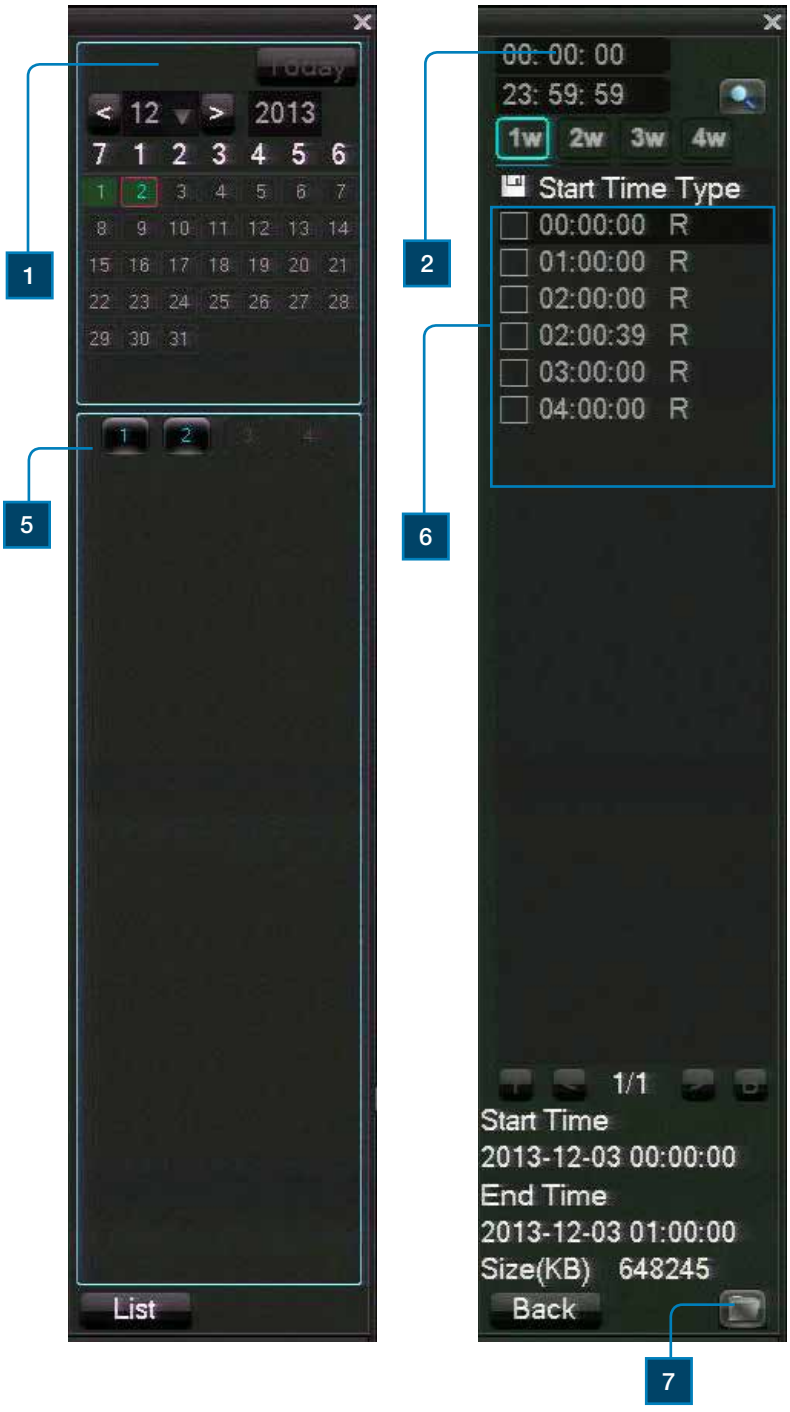


SYSTEM SETUP
SEARCH MENU

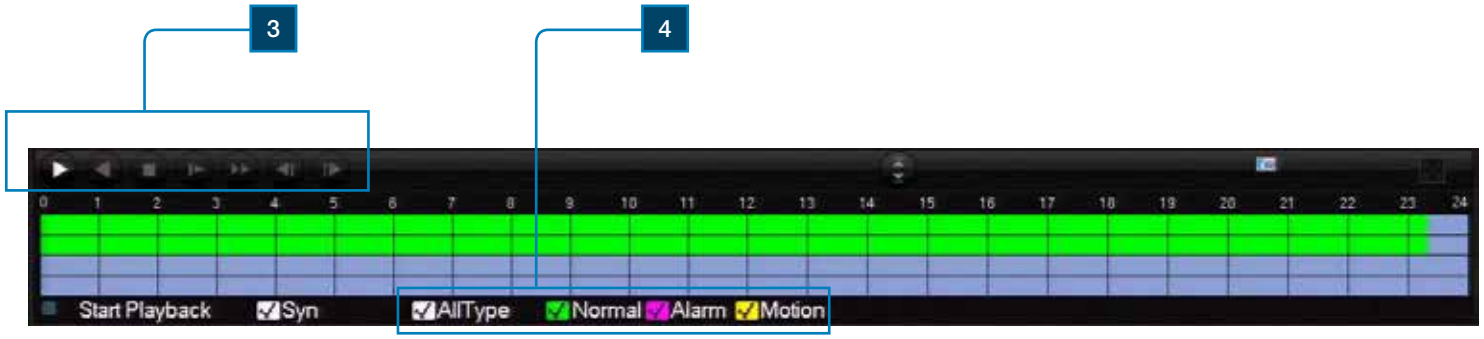
Search Menu

The main menu allows access to six sub-menus: Search , Configuration, Storage, Output, Maintain and Shutdown. Left click the associated icons and the sub-menu will launch. Right click will to escape out of the sub-menu.



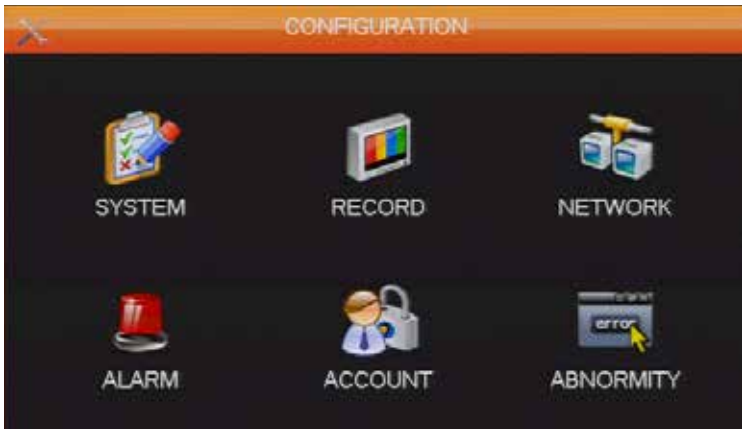


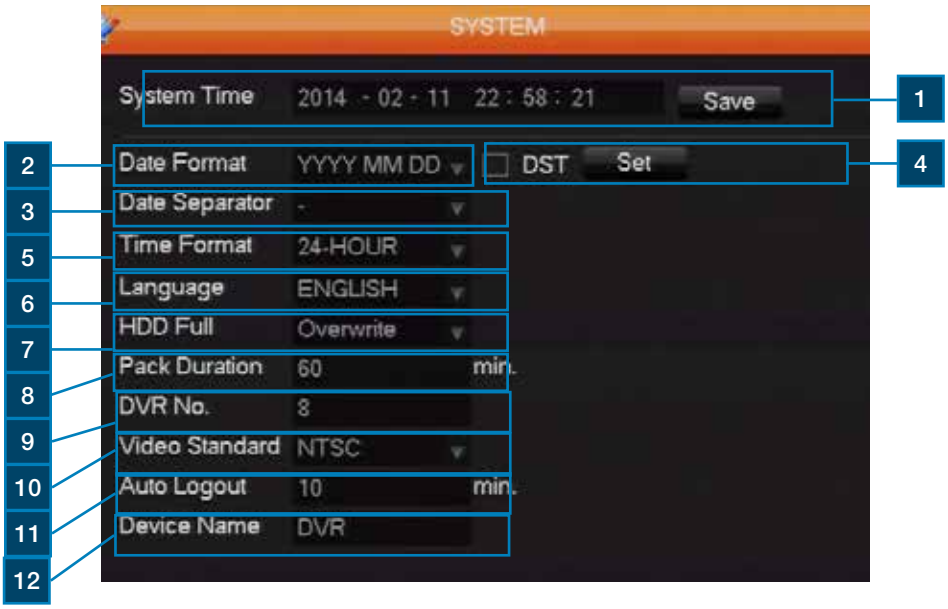
1. **Calendar**
   Select a date to search recordings
2. **Time**
   Select time frame to search
3. **Play Controls**
   Use the controls to control playback
4. **Recording Mode**
   Define alarm mode to search by
5. **Channel**
   Choose camera channel to search
6. **List**
   All recordings will be listed by time
7. **Backup**
   Select the folder icon to back up to an external location
8. **Recording List**
   All recordings will be listed by time



Configuration Menu

Selecting the configuration icon from the Main Menu will launch the configuration sub-menu. This menu will give access to the System, Record, Network, Alarm, Account and Abnormality menus.





System Menu

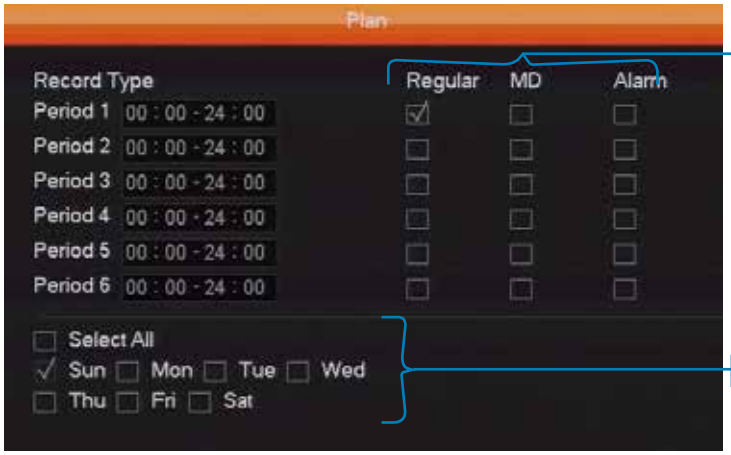
The sytem menu determines basic dvr settings

1. **System Time**
   Set the current date and time
2. **Date Format**
   Modifies the way the date is displayed
3. **Date Separator**
   Select the seperator for date display
4. **DST**
   Click to enable DST, and select “Set” to adjust DST settings
5. **Time Format**
   Select 12 or 24 hour display mode
6. **Language**
   Choose from 29 languages
7. **HDD Full**
   When the Hard Drive reaches full capacity, select “overwrite” to overwrite files from earliest to latest date. Select “Stop Recording” to stop recording when Hard Drive is full.
8. **Pack Duration**
   Sets the length for each recording, choose between 1 to 120 minutes
9. **DVR No.**
   Set the number of the DVR when used with other DVR systems
10. **Video Standard**
    Choose between NTSC (North America) or PAL (Other regions) standards for video display
11. **Auto Logout**
    Choose the interval between user log in and automatic logout. 0 means no setting, and can be set to a max of 60 minutes.
12. **Device Name**
    Enter a custom name for the DVR

NTSC or PAL?

NTSC (National Television Standards Committee) is the video system or standard used in North America and most of South America. In NTSC, 30 frames are transmitted each second. Each frame is made up of 525 individual scan lines.

PAL (Phase Alternating Line) is the predominant video system or standard mostly used overseas. In PAL, 25 frames are transmitted each second. Each frame is made up of 625 individual scan lines.



Record Menu

The record menu determines recording settings, there are two tabs under the menu

Local Channel Tab

1. **Channel**: Select channel
2. **Compression:** Set compression setting (currently only H.264)
3. **Resolution**: Select resolution standard, D1, CIF, or 960H
4. **Frame Rate (FPS):** PAL=1-25 fps, NTSC= 1-30 fps.
5. **Bit Rate Control**: Choose either CBR(constant) or VBR (variable) to set image quality settings
6. **Quality**: When VBR is selected for Bit Rate, select maximum video quality setting
7. **Audio**: Enable or disable audio recording for the channel
8. **Bit Rate (Kb/S)**: Select network communication speed
9. **Snapshot**: Set snapshot settings, including mode (trigger or schedule), image size, image quality, and frequency
10. **More Sets**: Choose to launch sub-menu
    a. **Channel Name Display**
    Check to display channel name on monitor
    b. **Date Display**: Check to display date on monitor
    c. **Channel Display**: Set the position of Channel name on monitor
    d. **Time Display**: Set the position of time on monitor
    e. **Video Cover**: Check to enable privacy cover
    f. **Set Area**: Choose to set area for video privacy cover on monitor. Size of cover can be resized using cursor

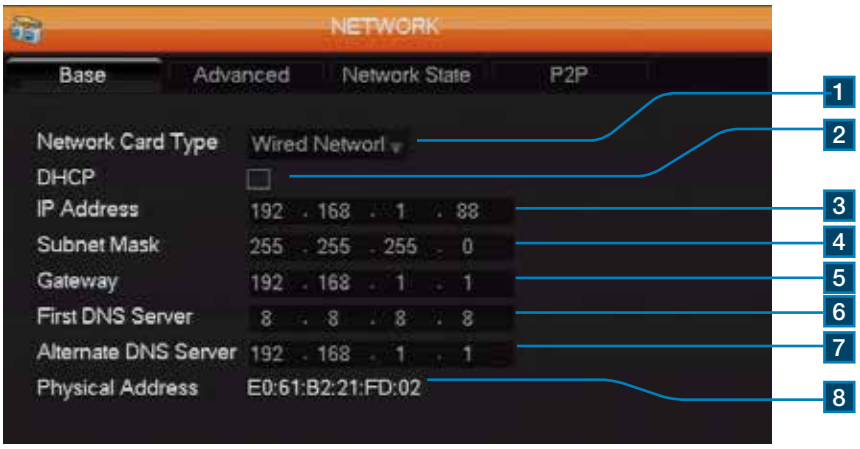
Record Plan Tab

Recording configurations are set in this tab.
The colored bars correspond to recording format on each day and length of time. Green represents Regular recording, Yellow is Motion Detection and Red is Alarm recording mode. Settings can be modified by clicking the Set button.

11. **Channel**: Select video feed channel
12. **Copy**: Copy settings to other channels
13. **Set**: Choose to specify recording settings for day
14. **Record Type**: Set the recording times. Up to six segments can be set per day
15. **Regular, MD and Alarm**: Check one to specify recording type for the recording period
16. **Select All, Sun, Mon, Tue, Wed, Thu, Fri, Sat**
Check one, some or all to apply settings above to one or more days of the week

Audio/Video Recording

Caution: Audio surveillance in some states is illegal or requires permission from one or both parties to record someone's voice. Laws are also different from residential vs. commercial applications. Some federal, state, and local laws prohibit certain surveillance activities and/or the use or distribution of the information obtained from such activities. Prior to using this system, you should become familiar with the pertinent laws to ensure compliance with those applicable to surveillance activities.



Network Menu

Use this menu to set DVR network parameters. The menu contains 4 tabs. The DVR will default to an IP address of 192.168.1.88

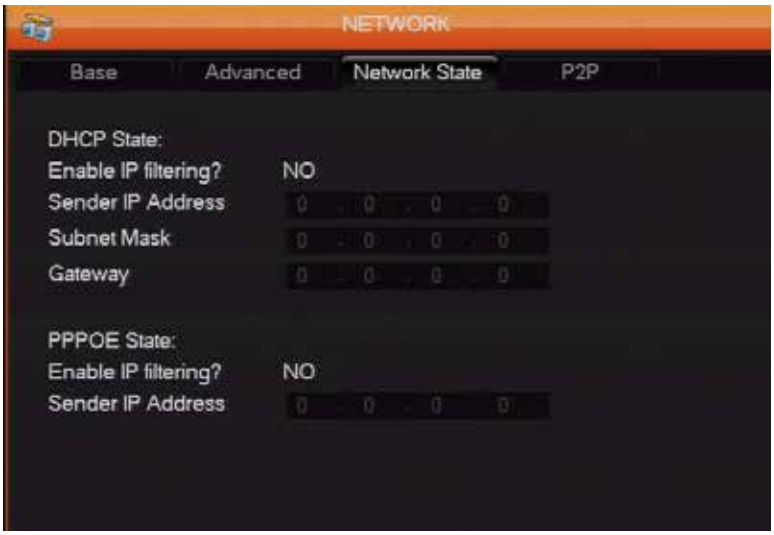
Base Tab

1. **Network Card Type**
   The DVR has a built in ethernet card
2. **DHCP**
   Check the box to enable automatic IP addressing. Otherwise, use the boxes below to manually set parameters
3. **IP Address**
   Assign IP address
4. **Subnet Mask**
   Assign IP address for subnet
5. **Gateway**
   Enter the IP address for network gateway
6. **First DNS Server**
   Enter address for preferred server
7. **Alternate DNS Server**
   Enter address for alternate server
8. **Physical Address**
   Displays address for current port

Advanced Tab

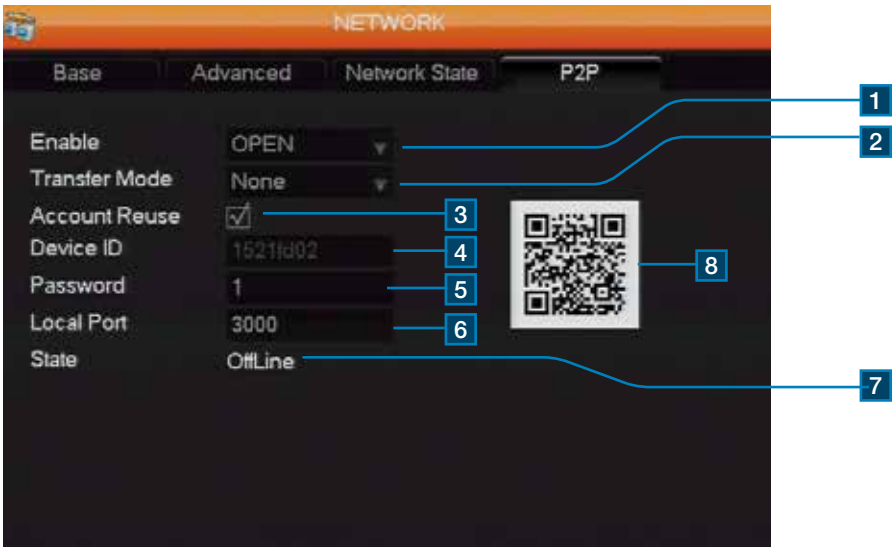
The advanced settings tab will allow access to configure network settings. Each option will have a Setting button that will launch a open to adjust the parameters

1. **PPPoE**
   Enable PPPoE. Clicking Setting will allow entry of information provided by your Internet Service Provider (ISP)
2. **3G**
   Enable a wireless 3G connection. Clicking Setting will allow entry of information provided by your wireless provider
3. **DDNS**
   Enable a DDNS hostname
4. **NTP**
   Enable Network Time Protocol
5. **IP Filter**
   Assign IP addresses to a block/allow list
6. **Multicast**
   Set the transfer parameters and port settings.
7. **Email**
   Enable and adjust settings for DVR email messages
8. **FTP**
   Set File Transfer Protocol for server
9. **Alarm Server**
   Enter settings for alarm server
10. **Push**
    Enter settings for push server
11. **Auto Register**
    Enter settings for auto register



Network State Tab

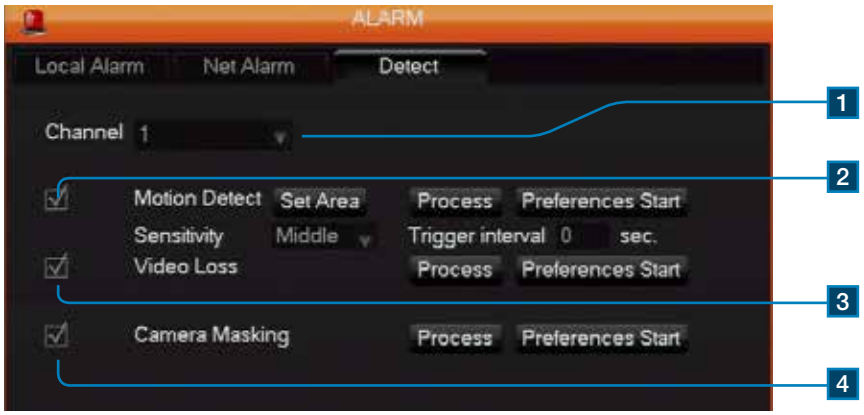
Settings for Network State are not user adjustable



P2P Tab

Configure Peer to Peer settings for the DVR

1. **Enable**
   Enable or Disable P2P settings
2. **Transfer Mode**
   Select transfer settings
3. **Account Reuse**
   Check to enable the account to be used multiple times
4. **Device ID**
   Displays DVR's unique ID
5. **Password**
   Specify P2P password
6. **Local Port**
   Enter network port for connection
7. **State**
   Displays network status
8. **QR Code**
   Scan with your smartphone to connect



Detect Tab

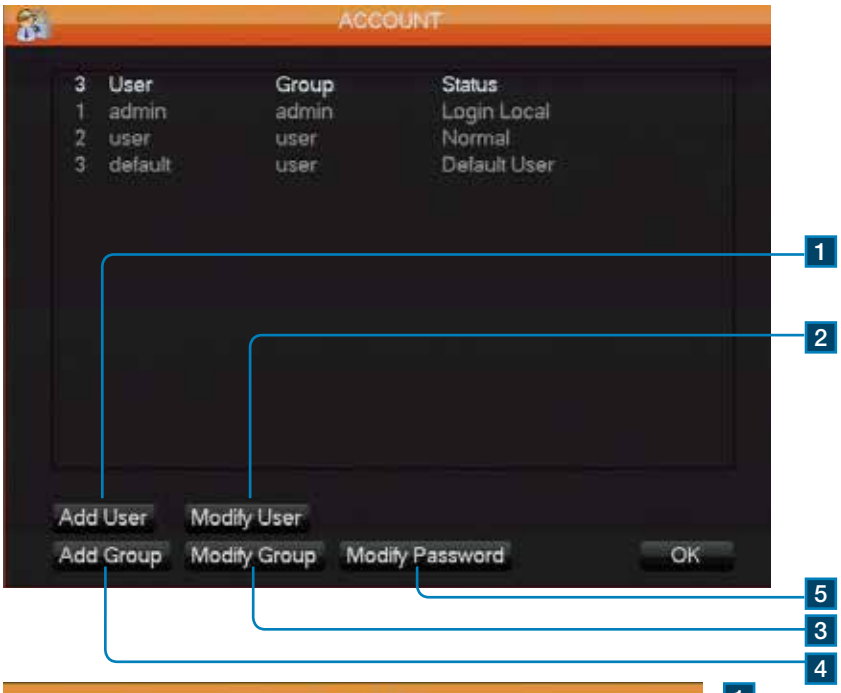
Configure detection settings for alarms

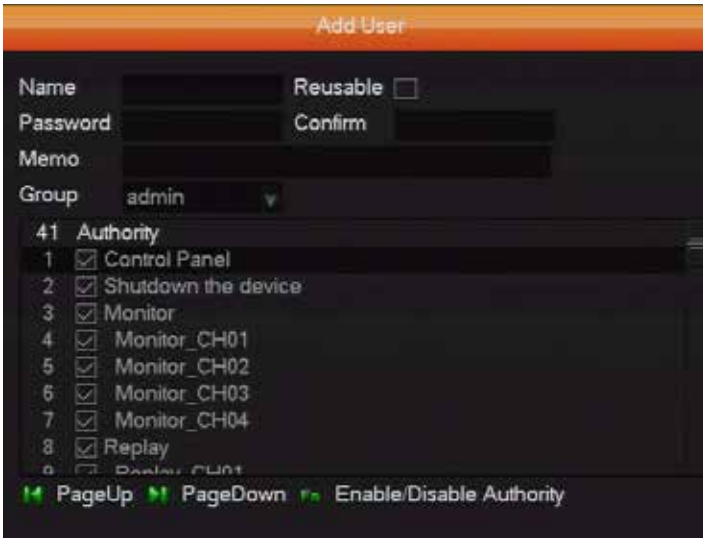
1. **Channel**
   Select video feed channel

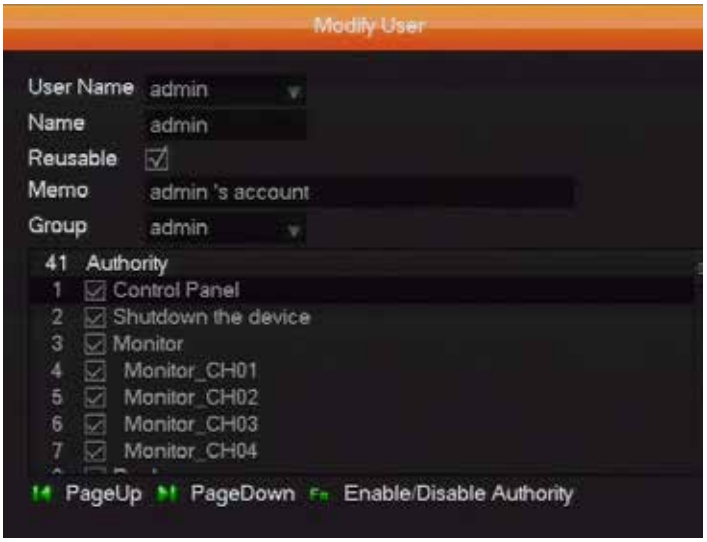
2. **Motion Detect**
   Check box to enable motion detect. Click the Set Area button to define detection area. Click Process button to launch Process Sub-Tab. Click the Preferences Start/Stop button to begin or end preference. Use the drop down menu to set Sensititvy and the Trigger Interval can be set by seconds.

3. **Video Loss**
   Check box to enable alarm in video feed is lossed. Click Process button to launch Process Sub-Tab. Click the Preferences Start/Stop button to begin or end preference.

4. **Camera Masking**
   Check box to enable Video privacy mask. Click Process button to launch Process Sub-Tab. Click the Preferences Start/Stop button to begin or end preference.



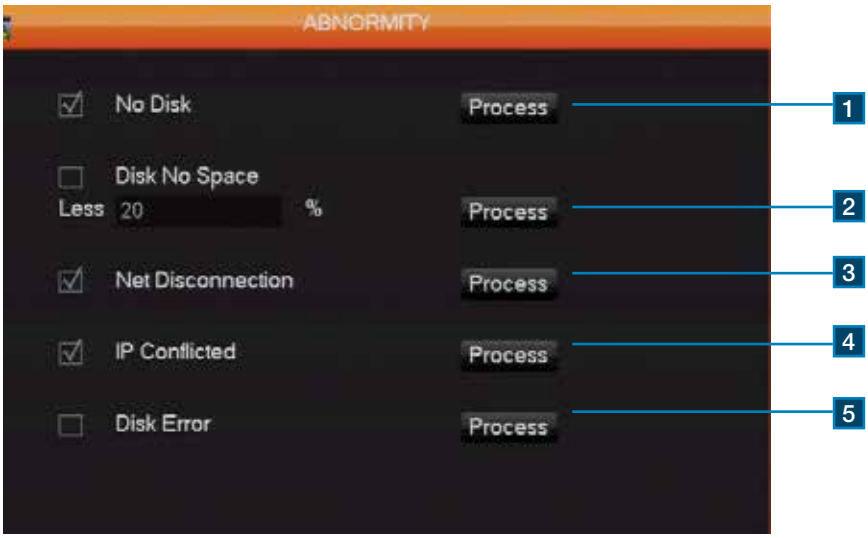




Account Menu

The Account menu contains settings for managing system Users and groups of Users.

1. **Add User**
   Adds group member information and sets authorizations.
   The default users are “admin”, “user” and a hidden “default”. The password of the first two usernames is 123456. An “admin” user has full system authorization; a “user” only has surveillance and playback authorization.
   The hidden “default” user operates without a password in login mode and cannot delete.
   The DVR logs in automatically using the default account if there is “no user login”. A User can revise some limits of power so some operations can be performed without logging in.
2. **Modify User**
   Modifies existing group member information and authorizations
3. **Add Group**
   Adds groups and sets up group authorizations. Sets up a group and authorizes 60 items, including control panel, shut down, live view, playback, record, record backup, P/T/Z control, account, system information, alarm in /out settings, system configuration, search log, log delete, upgrade, operation authority, etc
4. **Modify Group**
   Modifies existing Group information
5. **Modify Password**
   Change passwords A password must be 1-6 characters in length and can use characters including letters, numbers, and limited symbols: underline, dash and dot. You cannot use a space as a beginning or ending character.
   Any account with management (admin) authorization can change the passwords of other accounts.



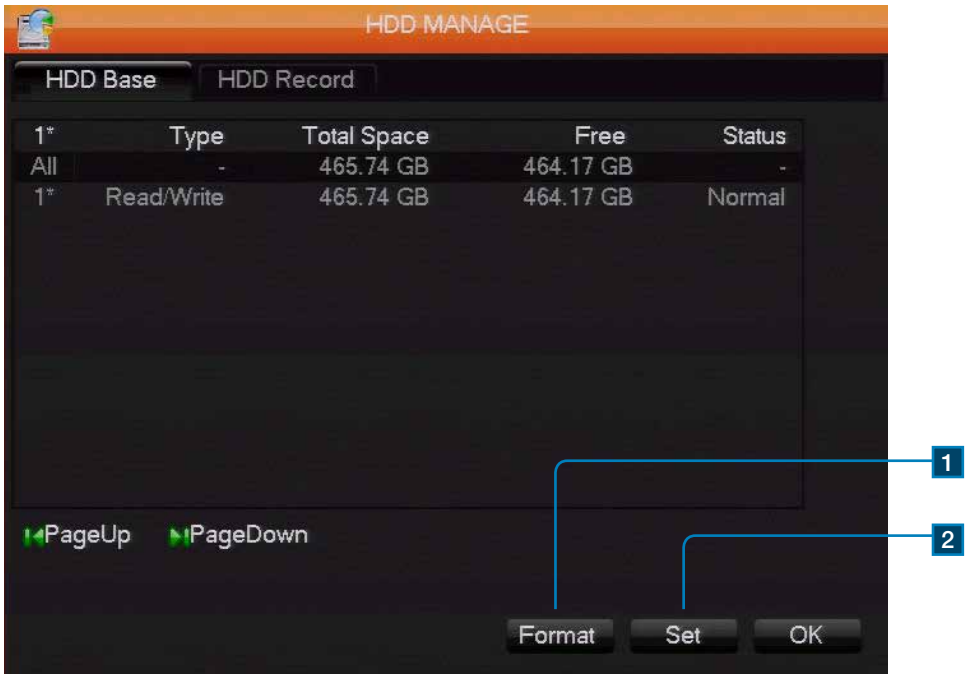
Abnormality Menu

There are five items in the Abnormality menu. To activate a warning or error message function, click on the check box beside it. The Process button beside each item gives access to further settings for that item.

1. **No Disk**
   Displays a warning when the internal hard disk drive is not present or can't be detected.
   Process accesses Alarm Output , Show Message and Send Email settings.
2. **No Disk Space**
   Displays a warning when hard disk capacity is lower than the percentage threshold you enter. The Process button accesses the same items as the one for No Disk
3. **Net Disconnection**
   Displays a warning when a network is not connected. The Process button access Alarm Output, Show Message, Send Email and Record Channel
4. **IP Conflict**
   Displays a warning when IP addresses conflict. The Process button accesses the same items as the one for No Disk
5. **Disk Error**
   Displays a warning when there is an error in reading or writing to the hard disk. The Process button accesses the same items as the one for No Disk

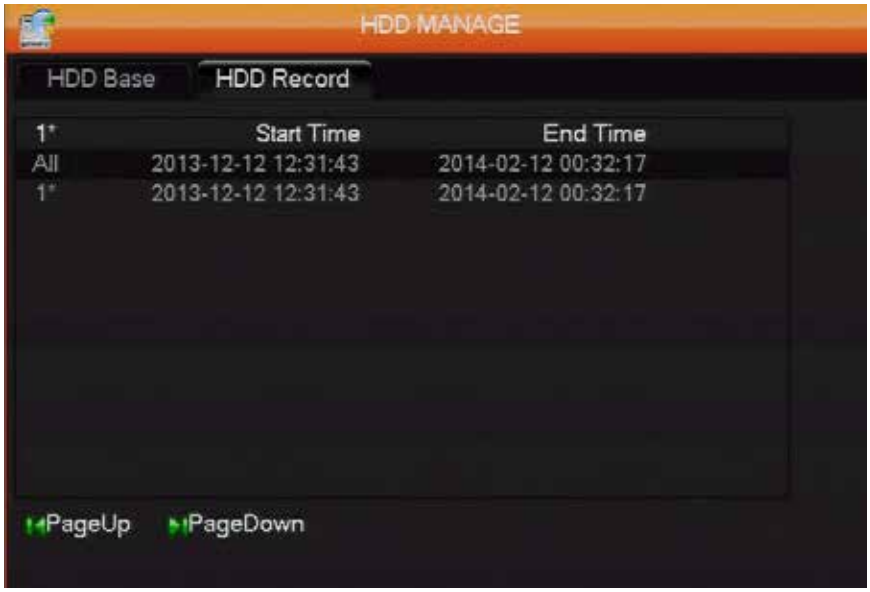
SYSTEM OPERATION
STORAGE MENU

Storage Menu
The Hard Disk Management menu has two tabs, Base and Record which give access to some disk management functions. Maintains and manages the DVR's internal hard disk:



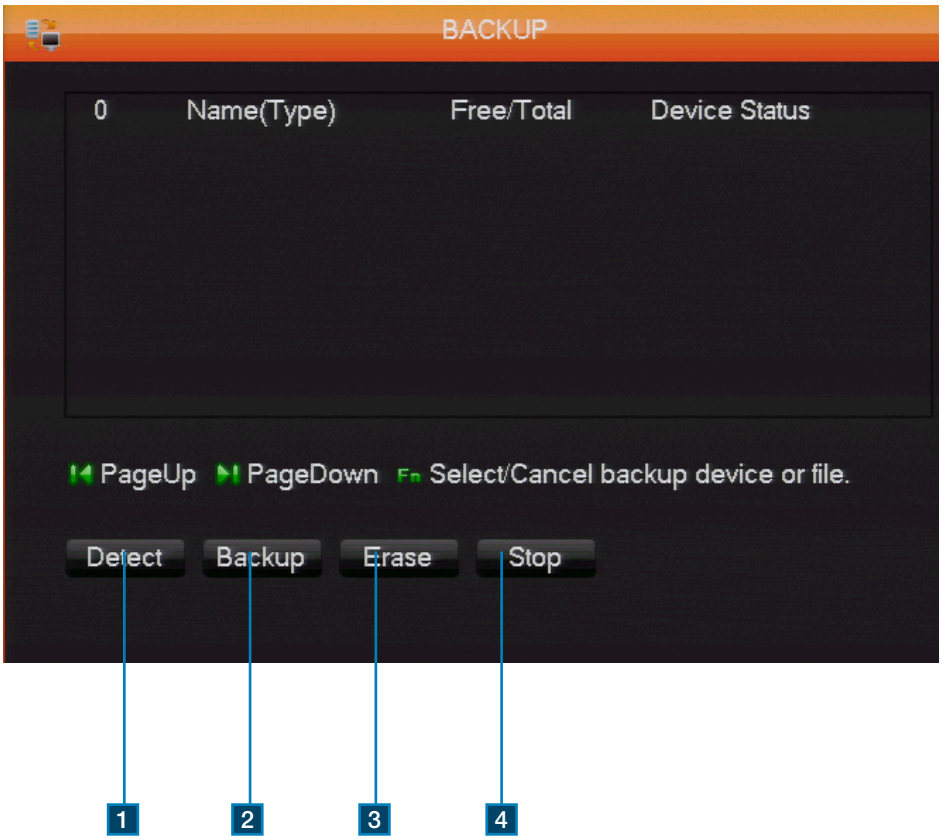
HDD Base Tab
Shows DVR storage capacity, available space and operational status.

1. **Format**
   Enables User to format the DVR's internal hard disk
2. **Set**
   This controls the hard disk's access mode setting. The options are read-write, read only or redundancy mode, with check boxes to enable or disable each mode. In read only mode, video data cannot be recovered. The sub-menu also displays a variety of drive status information.



HDD Record Tab
Displays a recording log with recording start and stop times.

Formatting the Internal Hard Drive
If you installed a new hard drive, you must format the hard drive in the DVR before it can be used. Clicking on the HDD Format button will begin the formatting process. After formatting, the system will restart. ATTENTION: Formatting the internal HDD erases all video data. This step cannot be Undone.



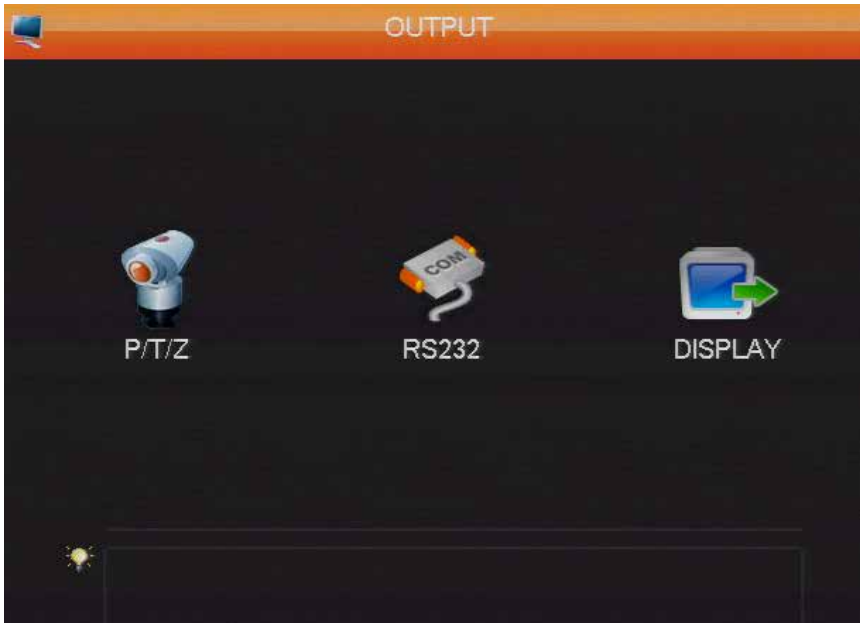
Backup Menu

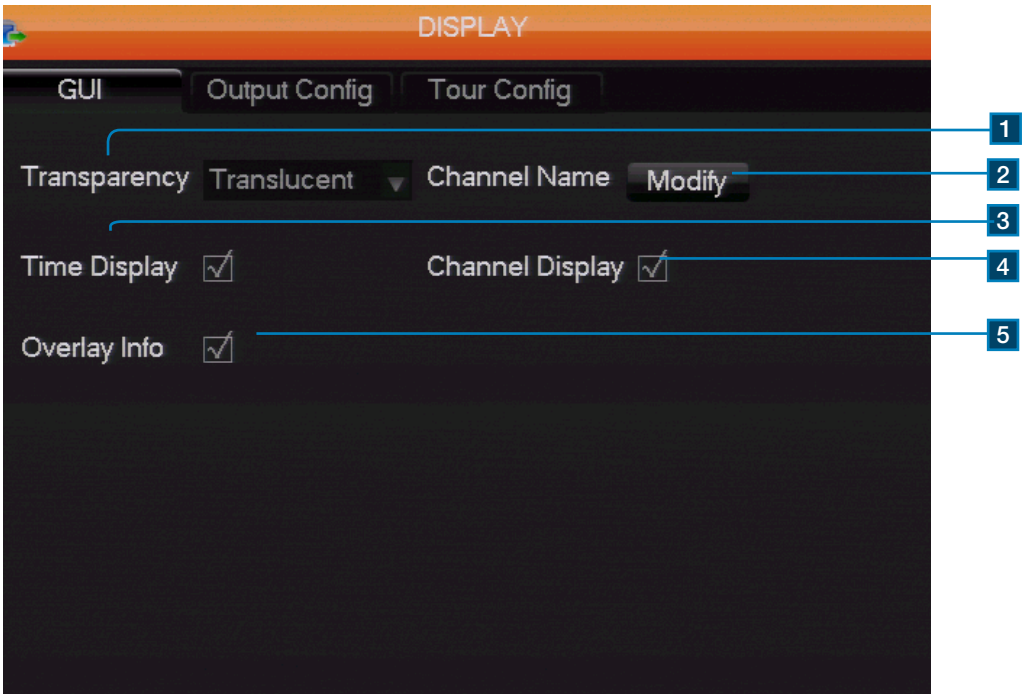
Connect an External USB device to one of the USB ports to back up recordings from the DVR's internal hard disk using the commands in the "Backup" menu

1. **Detect**
   Identifies the external USB device and displays the device information.
2. **Backup**
   Click on the box for the target external drive then click on Backup to enter the Backup menu. Select the recording's Start and End times and click Add to add it to the list. Duplicate it by inputting the Start and End times again. Click Delete to clear the file list. Select the recording you want and click Start to backup, and display the time remaining.
3. **Erase**
   Deletes all data on USB backup device.
4. **Stop**
   Stop device

Output Menu

The Output menu has three sub-menu sections, P/T/Z, RS-232 and Display which control management of peripherals connected to the DVR system.





Display Menu

Display menu sets the unit's display and polling features. The menu has three tabs, GUI, Output Configuration and Tour Configuration.

GUI Tab

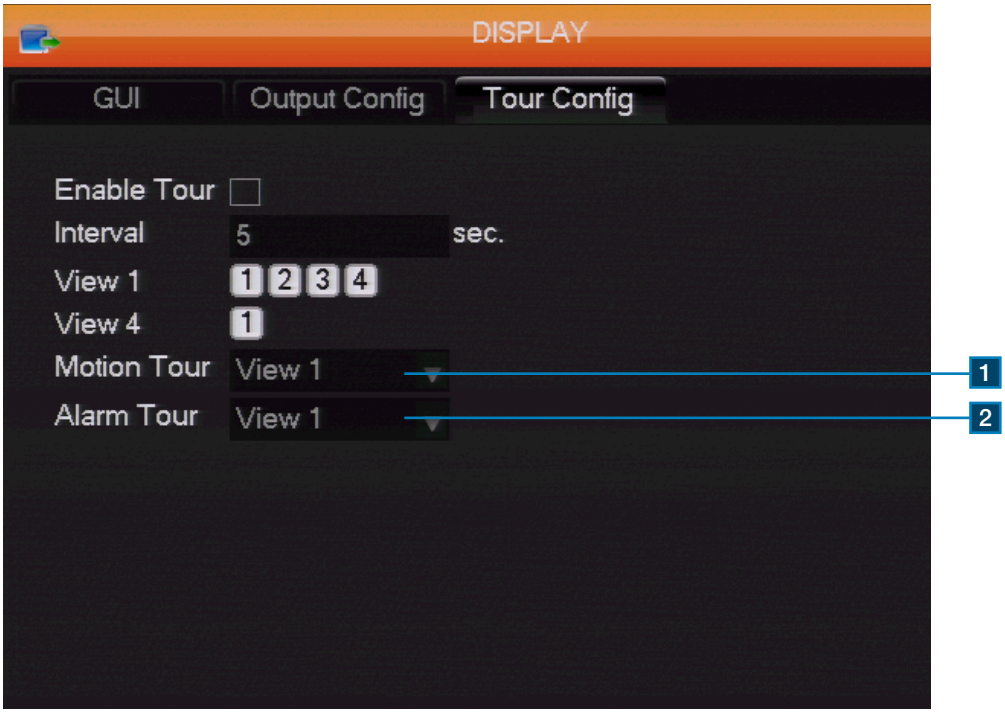
The GUI tab sets the appearance of the On Screen Display (OSD).

1. **Transparency**
   Has 4 levels of varying translucence or opacity.
2. **Channel Name**
   To modify a channel name, the available options are symbols, letters, and numbers.
   Note: 1) Channel names can use up to 48 half-width characters
   2) Limit to 16 characters, otherwise some problems may occur in multi-screen mode.
3. **Time Display**
   Selects whether the time is displayed on screen.
4. **Channel Display**
   Selects whether the channel name is displayed on screen.
5. **Overlay Info**
   Selects whether overlaying information is displayed on screen.

Output Config Tab

The Output Configuration tab displays several control settings for a video display monitor connected to the DVR system via the VGA port.

1. **VGA Output Resolution**
   The default resolution setting is 1024 × 768 @60Hz.
2. **TV Adjust**
   Adjust the display output area. It adjusts the image to the fit the display.
3. **VGA/TV Color Settings**
   Adjust the display's hue, brightness, contrasts and saturation settings.
4. **TV Color Settings**
   Adjusts the display's brightness, contrast and saturation settings.



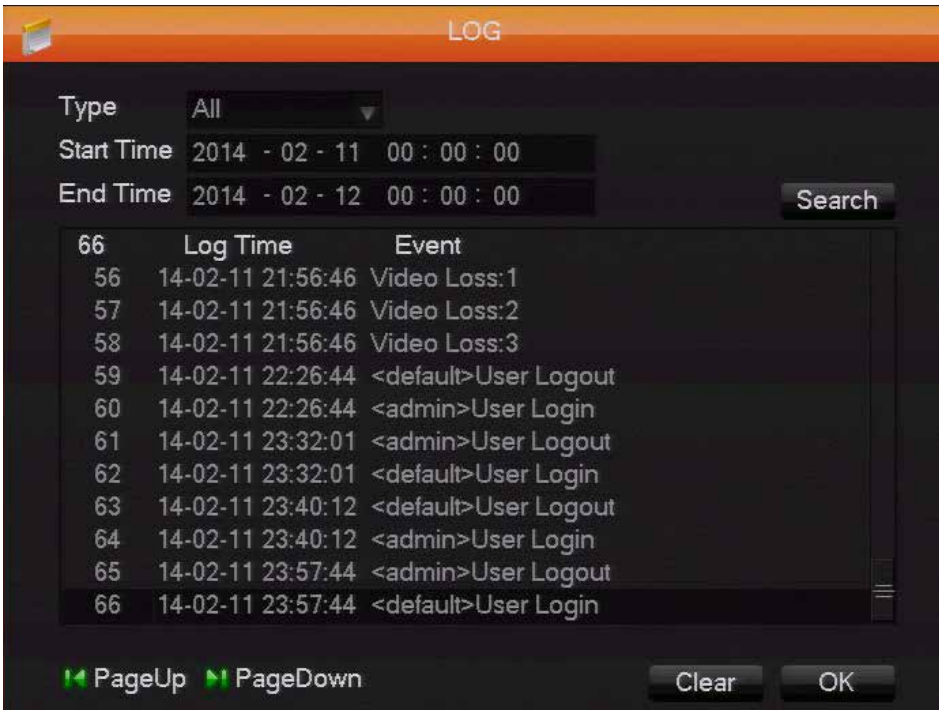
Tour Config Tab

The Tour Configuration tab sets up and enables the touring functions. This menu sets up the tour mode and intervals between rotations. The time interval option is between 5 and 120 seconds and includes mode for single, four, or eight, screen options.

1. **Motion Tour**
   Sets up motion detection-based tour mode.
2. **Alarm Tour**
   Sets up the alarm-based tour mode.

Note: Setting shortcut - click the button at the upper right-hand corner of the monitored display, or press the Shift Key, switches modes and allows you to control the tour.

SYSTEM OPERATION
MAINTENANCE MENU



Log Menu

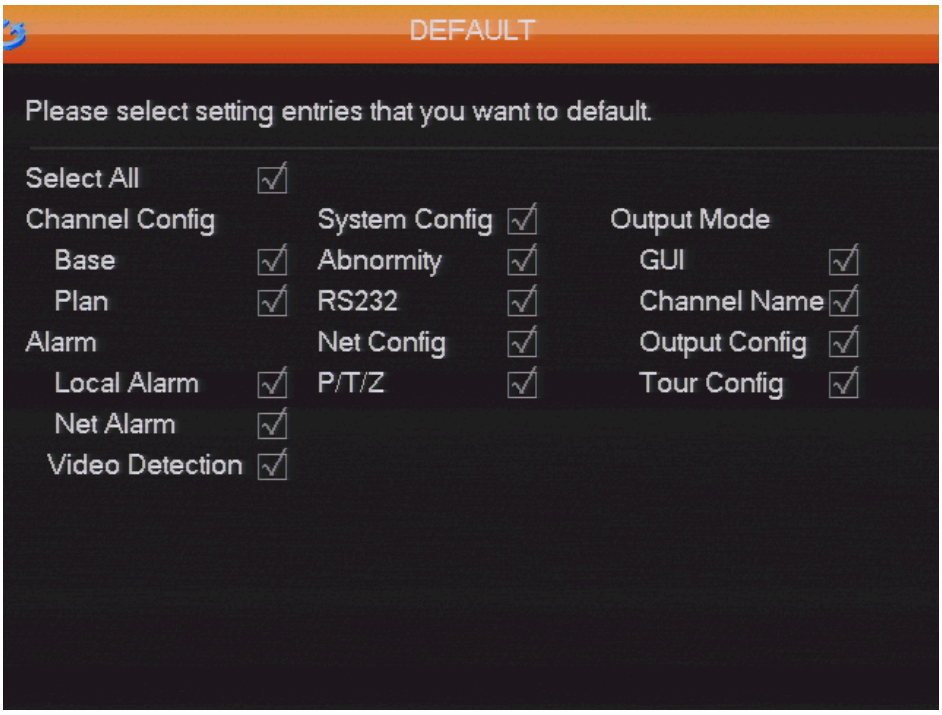
Displays system log information. To view log entries, select the log type and desired time segment and then press the Find button.
The system will display the log in tab form. You can also click the backup button to export the logs to your computer for backup.
Log types: system operation; configuration; data management; alarm event; recording; user management; log delete; document operation. Select the type and time segment to filter the log list.
Click “Clear” to delete all logs.

Version Menu

Displays features, software version etc. You can also upgrade the DVR’s firmware from here.

1. **Start**
   Connect a USB flash device, which contains the upgrade firmware and click “Start”.
   Note: Improperly upgrading the firmware could cause a startup failure. Only perform a firmware upgrade if you are sure you know what you are doing, or under professional supervision

   Visit FirstAlert.com for latest software and firmware updates



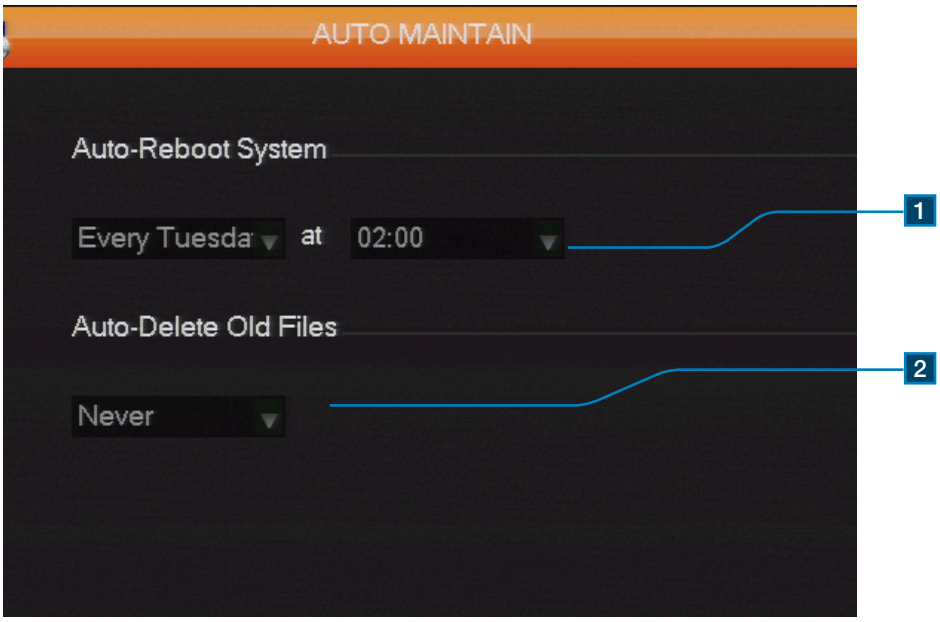
Default Menu

The Default menu restores system defaults. You can restore the defaults selectively by selecting only those items you require, or you can restore all defaults by selecting all items.

Note: Menu transparency, language, time format, video format, IP address, user IDs, etc. are not affected.

BPS Menu

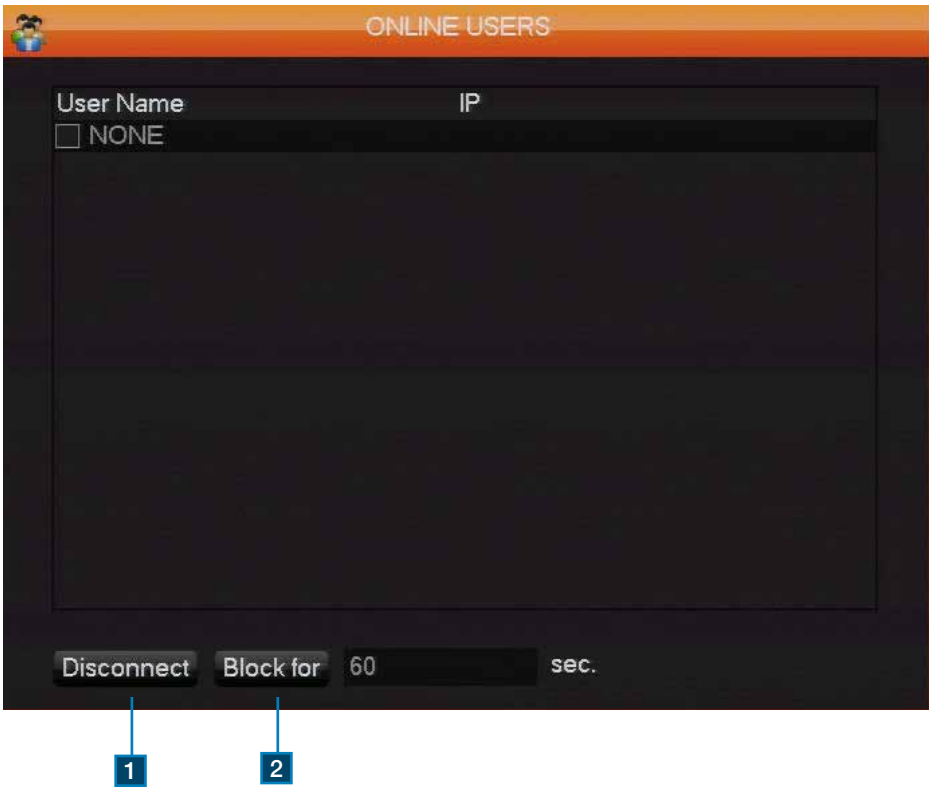
Displays the video size and data rate of each channel by waveform
Note: These are estimated values and are for reference only.



Auto Maintain Menu

Sets up auto maintenance items: auto-reboot will automatically reboot the DVR at days and times specified (reset all cameras) and auto-deletion of old files will delete files that reach the time limitation that is preset.

1. **Auto-Reboot System**
   Set the day and time to reboot
2. **Auto-Delete Old Files**
   Modifies when old files are deleted



Online Users Menu

Displays which Users are currently online accessing the system.

1. **Disconnect**
   Disconnect selected user
2. **Block For**
   Enter a time in seconds to temporary block the selected user

SYSTEM OPERATION
SHUTDOWN MENU & USB UPDATE

The system provides the ability with a controlled shut down, through a power down or with a Restart. To access the shut down system menu, right click the mouse to see the drop down quick menu and then select Shutdown. The following screen appears.

Menu Logout: Logs the user out. A request activity to the DVR from any user will require a login and password to gain access to the system.

Shutdown: Power Off shuts the system down in a controlled manner. The hard drive is kept running. If user wants to shutdown fully, user needs to turn off the button on back panel of DVR.

Restart System: Provides the user with a restart. The system will shut down and restart in a controlled way.

USB Firmware Upgrade

General description

Periodically, a firmware update will be issued to upgrade DVR features or address functionality. Follow the procedure below to upgrade.

Preparing to Upgrade

1. Use an USB flash disk, formatted with the FAT or FAT32 file system
2. Match the firmware upgrade file to your DVR model number

Procedure

3. Change the file name “**.bin” to “vss.bin”, such as change “General_DVR70XX_chnEnc_PN_V0.902.0000.7.R.20101027.bin” to “vss.bin”, and copy the file from the computer to the root directory of USB flash disk
4. Power up DVR, plug USB flash disk into the USB interface on the DVR
5. To upgrade, select “MAIN MENU” - “MAINTAIN” - “VERSION” , and click the “Start”
6. Wait as the upgrade processes, restart DVR when prompted
7. Click “OK” to restart DVR

Notes

8. During the upgrade process, do not power down the DVR or remove the USB flash disk
9. If the DVR fails to upgrade correctly, or the system crashes during upgrading: Power down by removing the power cord and rebooting the DVR

REMOTE ACCESS
SMARTPHONE APPS

Apps for Android and iOS

Installing the App from Google Play
Using the Google Play or Marketplace app on your Android smartphone, search and download the IMSeye app.

Installing the App from iTunes
Using the Google Play or Marketplace app on your Android smartphone, search and download the IMSeye app.

LAN viewing on a shared network or from a Remote location *(From iPhone/iPad/Android)*

1. Make sure your mobile device is connected to the your Local Area Network or a Wi-Fi, 3G or LTE network
2. Open IMSeye IP Camera Viewer App on the mobile device
3. Open the Device List
4. Select the camera channel from the Device List

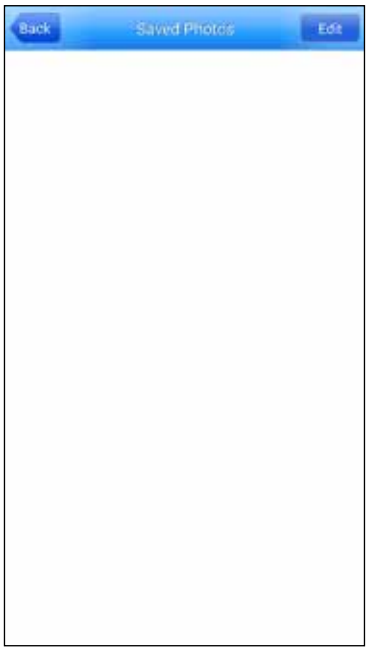
The main page of the Android IMSeye will give access to the features of the app

Choosing Device List will display devices connected to the synced DVR

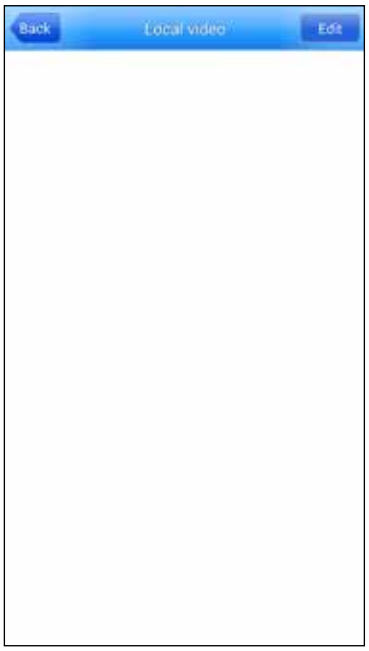
Device detail will allow changes to device settings, such as IP address and user parameters

Device detail will allow changes to device settings

The option page will set the alert settings for the selected device

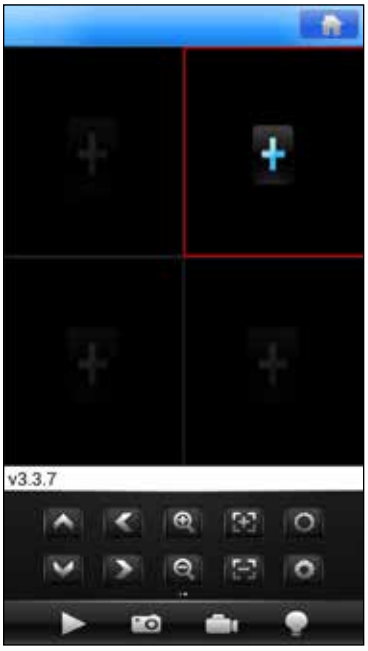


Saved photos can be viewed from this page



Saved videos can be viewed from this page

REMOTE ACCESS
SMARTPHONE APPS



PTZ devices can be controlled from this page

Video feeds can be viewed from this page

The main page of the iOS IMSeye will give access to the features of the app

Choosing Device List will display devices connected to the synced DVR

Device detail will allow changes to device settings

Device detail will allow changes to device settings

PTZ devices can be controlled from this page

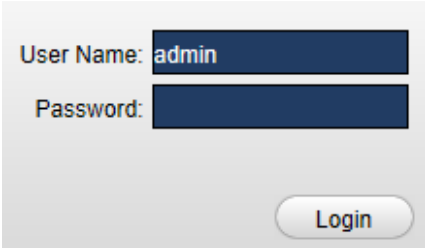
Video feeds can be viewed from this page

The settings page will set the alert settings for the selected device

Saved photos can be viewed from the page on the left and saved videos can be viewed from the page on the right.

REMOTE ACCESS
V SHOW

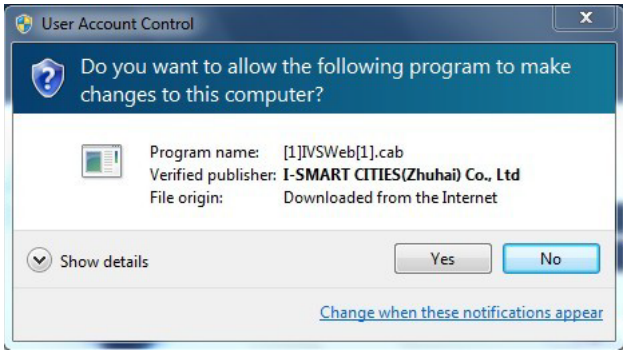
VSS Software



Introduction
The VSS software allows both local network and worldwide access to your DVR

Installation
Microsoft Internet Explorer version 8,9 or 10 is required is to dial into the DVR. The DVR must also be connected to a network with Internet access.

1. Retrieve the DVR IP address (See page 20)
2. Open Internet Explorer
3. Type the DVR IP Address into the address bar, and press enter, also add the HTTP port (i.e., http://192.168.1.182:10812)
4. Default Login is username “admin” and password is blank


User Account Control
Do you want to allow the following program to make changes to this computer?
Program name: [1]IVSWeb[1].cab
Verified publisher: I-SMART CITIES(Zhuhai) Co., Ltd
File origin: Downloaded from the Internet
Show details
Yes
No
Change when these notifications appear

After logging in, Active X will install (if not already installed) and installation will proceed
Click “Install”, then re-launch the browser
After Active-X has been installed, you can login using the default username and password.
Press “Exit” to quit at any time

Note: If you are using Internet Explorer 9.0 and encounter an error, it may be a compatibility problem. To correct, go to the “Tools” menu in Internet Explorer, and select “Compatibility View Settings”, and select the “Display all websites in Compatibility View” option. Press “Close” and refresh the screen

Main Interface

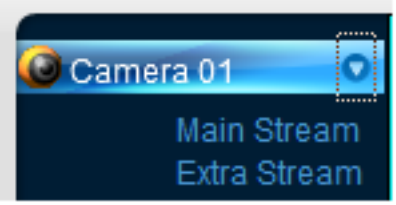
Log In
After launching the VShow software, the log in screen will open. The default password and username are “super.” After login, the password can be modified the by entering the settings menu.

Using the VShow software
After you are logged in, the main DVR interface will launch (see image below)
Certain settings can be adjusted by selecting menus to the right of the camera display area. The menus are:

1. **Channel**
   Channel Selection
   Select channel
2. **Function Key**
   Local playback: playback local recording
   Open all: play live video in view
3. **Surveillance window**
   Change window layout
4. **Image color**
   Image color: modify brightness, contrast, saturation and hue
   Other: set capture path, recording download path and reboot
5. **PTZ Control**
   Control PTZ devices
6. **Menu**
   System configuration, recording search, alarm settings, exit

Live View

In the Web interface, select the focus window in the live window. The focus window has a light blue border. From the left channel column, select the channel, as shown in below:



Channel Choices

Click on arrow in upper right corner, this allows you to choose to open or close the channel to the main stream or secondary stream.

The Channel display will show the current DVR's IP address, local timer and transfer rate in the upper right corner.
The lower left corner shows the current video feed's channel name.

Click one of the icons, shown above, to switch between single screen and multi-screen views.

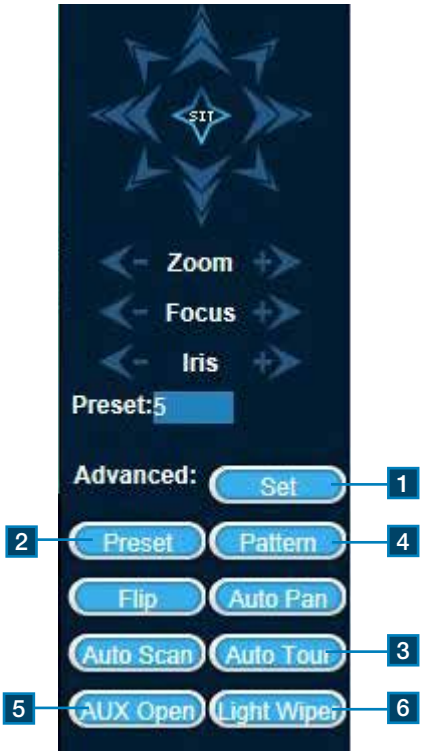
The function icons are located in the lower right corner of the display window. The six icons represent :

1. **Area Zoom:** Enlarge Video image
2. **Multi-Screen switch:** Switch from a single screen to multi-screen views and vice versa.
3. **Local Record:** Saves and records video to a local hard disk while in live view. Set up the recording path in the Configuration menu.
4. **Capture:** Captures the present video channel. Set up the path in "Other".
5. **Sound:** Turns audio on or off.
6. **Video Off**: Turns off the focus window.

PTZ Control

To set the P/T/Z protocol, see page 15.
Use these commands to control PTZ cameras. Step sizes are from 1 to 8, in increments of 1 step.

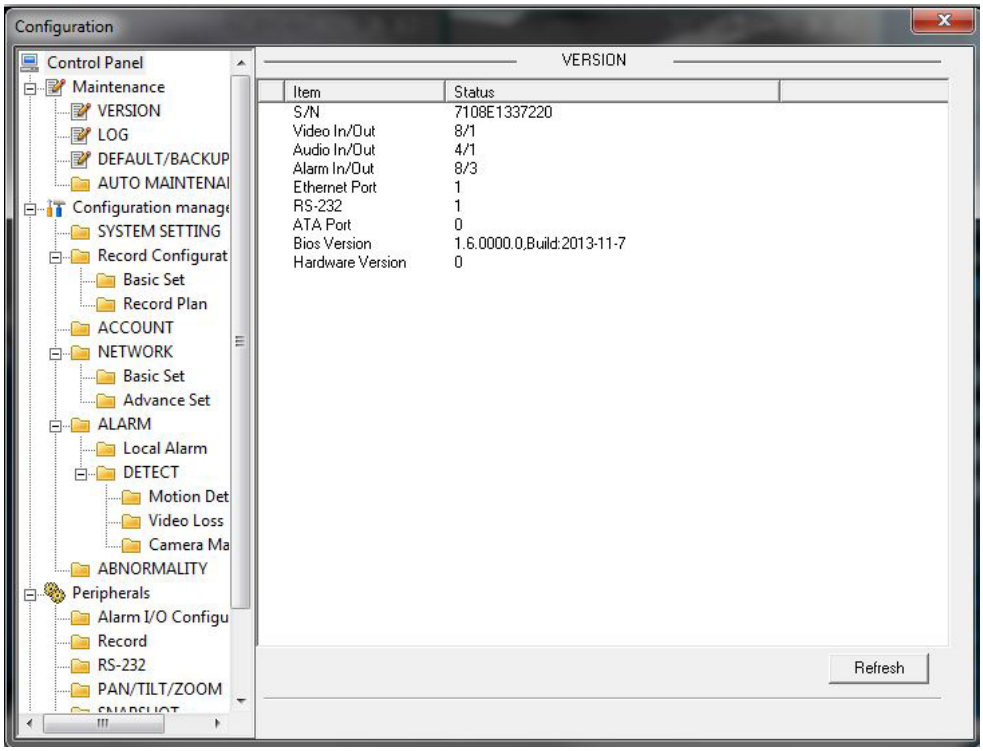
1. **Set** Enter and adjust the limits and presets for each channel
2. **Preset** Modify a preset position by using the directional buttons and inputting a preset number, then click "Add" to save.
3. **Auto Tour** Select "Tour". Point between the first cruise line and cruise input box value. Input numbers in "Path" and "Preset". Click "Add Preset" to add a preset value to the cruise path, and repeat to add additional presets. Click "Clear Preset" to delete a preset. Repeat this step to delete more presets.
4. **Pattern** Click "Pattern" in order to record an automated pattern. Then go back to the P/T/Z controls to modify the zoom, focus and iris, etc. Stop recording in the "Pattern" setting to save the pattern.
5. **AUX Open** Turn auxiliary components on and off.
6. **Light Wiper** Turn the Light Wiper protocol on and off.



REMOTE ACCESS
V SHOW

Configuration

Access the DVR's local configuration menu by clicking on "Configuration". See page 18 for user adjustable settings

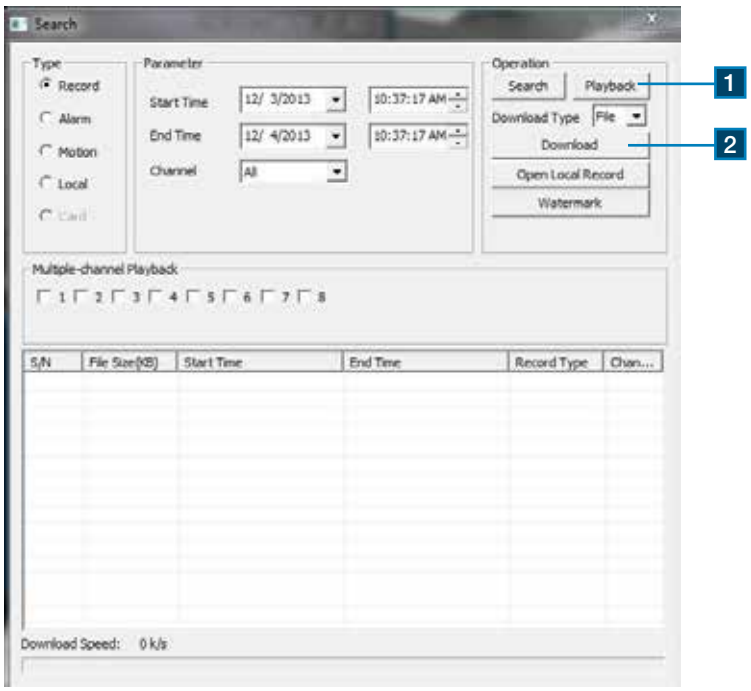


Records Search

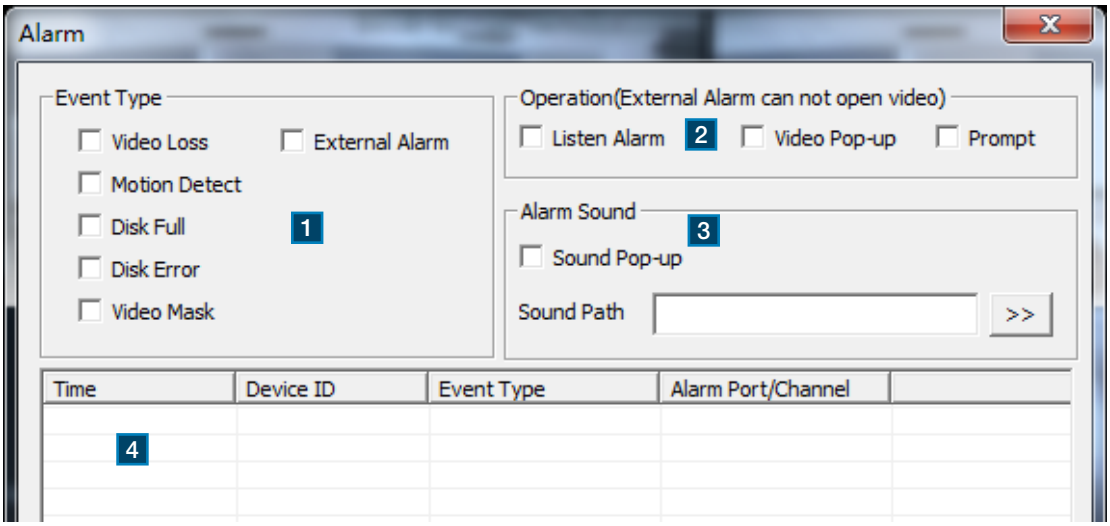
Click "Search" to open the search window. You can search and open recordings, alarms, motion detection, and local recordings.
Search Record by selecting the record type, starting and ending times, and clicking the search button. Select the desired file and it can be played.

1. **Play** Double-click a search result to play it in the video window. Control the video playback by using the control icons. A set of standard video playback control icons will display at the bottom of the video window.

2. **Download** Select a searched video to download. The download speed and percentage are displayed on the bottom of the screen.



Alarm Configuration

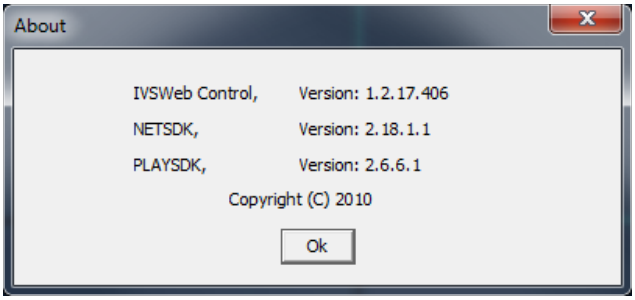


Click “Alarm” to enter the alarm setup menu.
Choose the type of alarm in the menu; monitor video loss, motion detection, disk full, disk error, video mask, and external alarms.
Click “Video Pop-up” to open the video loss, motion detection, hard disk full, hard disk failure, video block, video encoder, and alarm pop-up.
Click on “Prompt” to open the prompts. When an alarm occurs, it will pops up an alarm window menu, in real-time.
Click on the “Sound Pop-up” check box and you can choose an alarm tone that is pre-recorded on the local hard drive and will play when an alarm occurs. The alarm tone files are in the WAV format.

1. **Event Type** Click in a box to specify the type of alarms to display
2. **Operation** When an alarm is triggered, specify how it will be displayed
3. **Alarm Sound** Choose an alarm sound from the computer’s hard drive
4. **Log** Displays alarm events

About

The about icon, when clicked, will display the current software versions installed on the connected DVR



Logout

Clicking Logout will exit the main interface screen and return to the login page

IMS200 Software Installation

Introduction

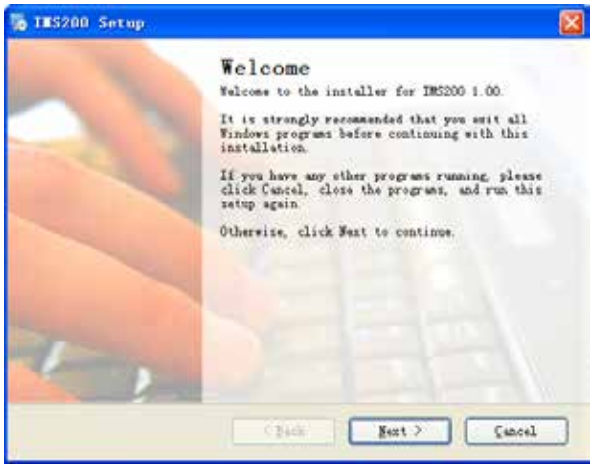
IMS200 is a professional surveillance system software which support muti-user, multi-window and multilingual display, voice talk, EMap, alarm and etc. IMS200 is compatible with various access devices. This is a stable, reliable and easy operation system.

Installation

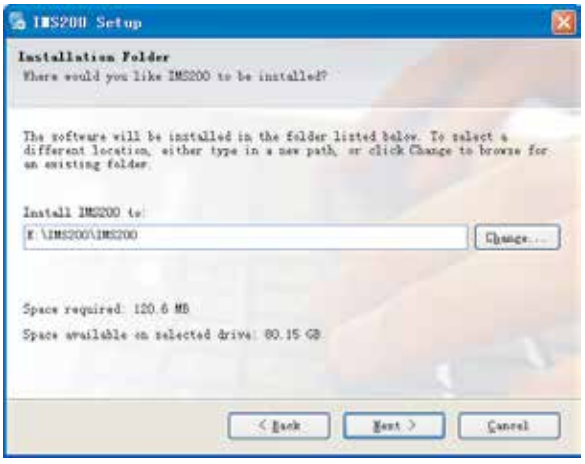
To install the program, place the cd into a cd/dvd drive on a computer.

1. Double left click “IMS_200_Client” icon to install the program.
2. The installation software will launch. Click “Next”,
3. Select an install path, the default installation path is “C:\Program Files\IMS200”
4. After clicking “Next”, the software will confirm the installation path, and will begin installation after clicking “Next”
5. The software will display a status window on the installation process
6. Click finish to exit the installer
7. The shortcut will be created on desktop after install the IMS200 system.

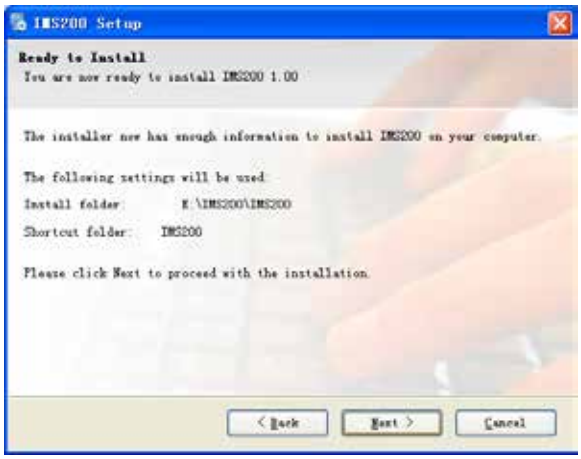
Step #2


IMS200 Setup
Welcome
Welcome to the installer for IMS200 1.00.
It is strongly recommended that you exit all Windows programs before continuing with this installation.
If you have any other programs running, please click Cancel, close the programs, and run this setup again.
Otherwise, click Next to continue.
< Back
Next >
Cancel

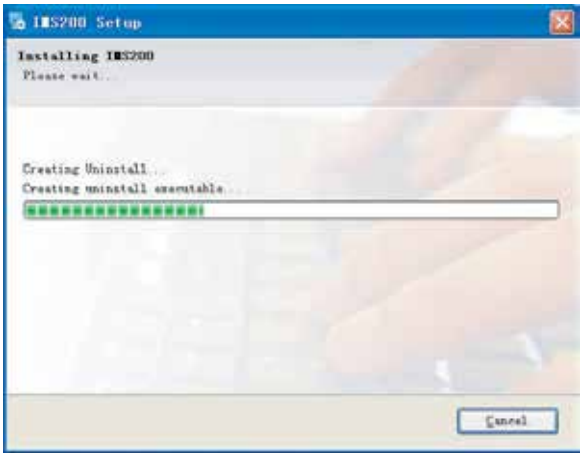
Step #3


IMS200 Setup
Installation Folder
Where would you like IMS200 to be installed?
The software will be installed in the folder listed below. To select a different location, either type in a new path, or click Change to browse for an existing folder.
Install IMS200 to:
E:\IMS200\IMS200
Change...
Space required: 120.6 MB
Space available on selected drive: 80.15 GB
< Back
Next >
Cancel

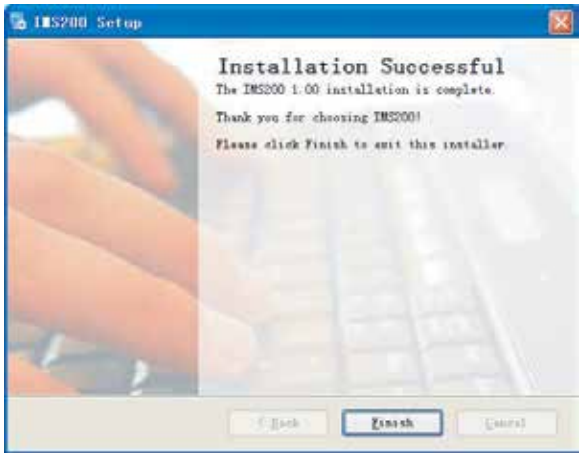
Step #4


IMS200 Setup
Ready to Install
You are now ready to install IMS200 1.00
The installer now has enough information to install IMS200 on your computer.
The following settings will be used:
Install folder: E:\IMS200\IMS200
Shortcut folder: IMS200
Please click Next to proceed with the installation.
< Back
Next >
Cancel

Step #5



Step #6



Main Interface

Log In

After launching the IMS200 software, the log-in screen will open. The default Password and Username are “super” After logging on, the password can be modified by entering the settings menu.

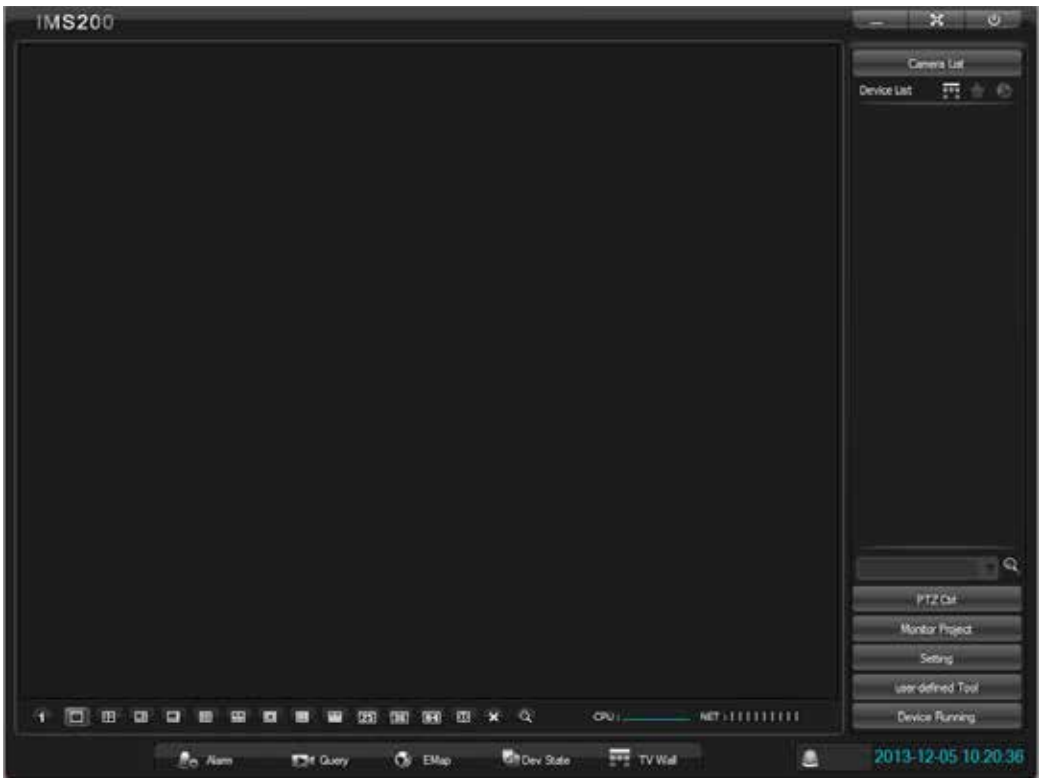
Using the IMS200 software

After you are logged in, the main DVR interface will launch (see image to the right)

Certain settings can be adjusted by selecting menus to the right of the camera display area. The menus are:

1. **Camera List**
2. **PTZ Control**
3. **Monitor Project**
4. **Setting**
5. **User-defined Tool**
6. **Device Running**
7. **Alarm**
8. **Query**
9. **EMap**
10. **Dev State**
11. **TV Wall**

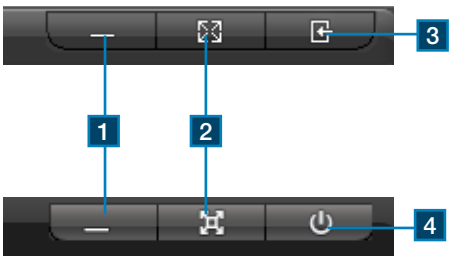
See page 56 for additional information on the menus. Settings can also be adjusted by using the right-click mouse button.



Navigation Controls

Depending on the current menu in use, the navigation controls on the top right of the program will allow minimizing the screen, maximizing the screen to full screen, returning to the main screen, or exiting the software

1. **Minimize** Click to minimize window
2. **Fit/Window** Click to either enlarge the window to full display size or return to window view
3. **Exit** Click to exit the current screen and return to the main display
4. **Log Off** Log off the DVR and close the IMS200 program



Interface

Shown on the main interface are channels, menu, functional keys, output mode keys, toolbar, upper right icons, alarm and status.
Display and control the real-time video. Select “voice talk”, “snapshot”, “record”, “output”,“save”, “go to” and “TVwall” function in a specific window.
Note: Menu functions are valid only under specific conditions

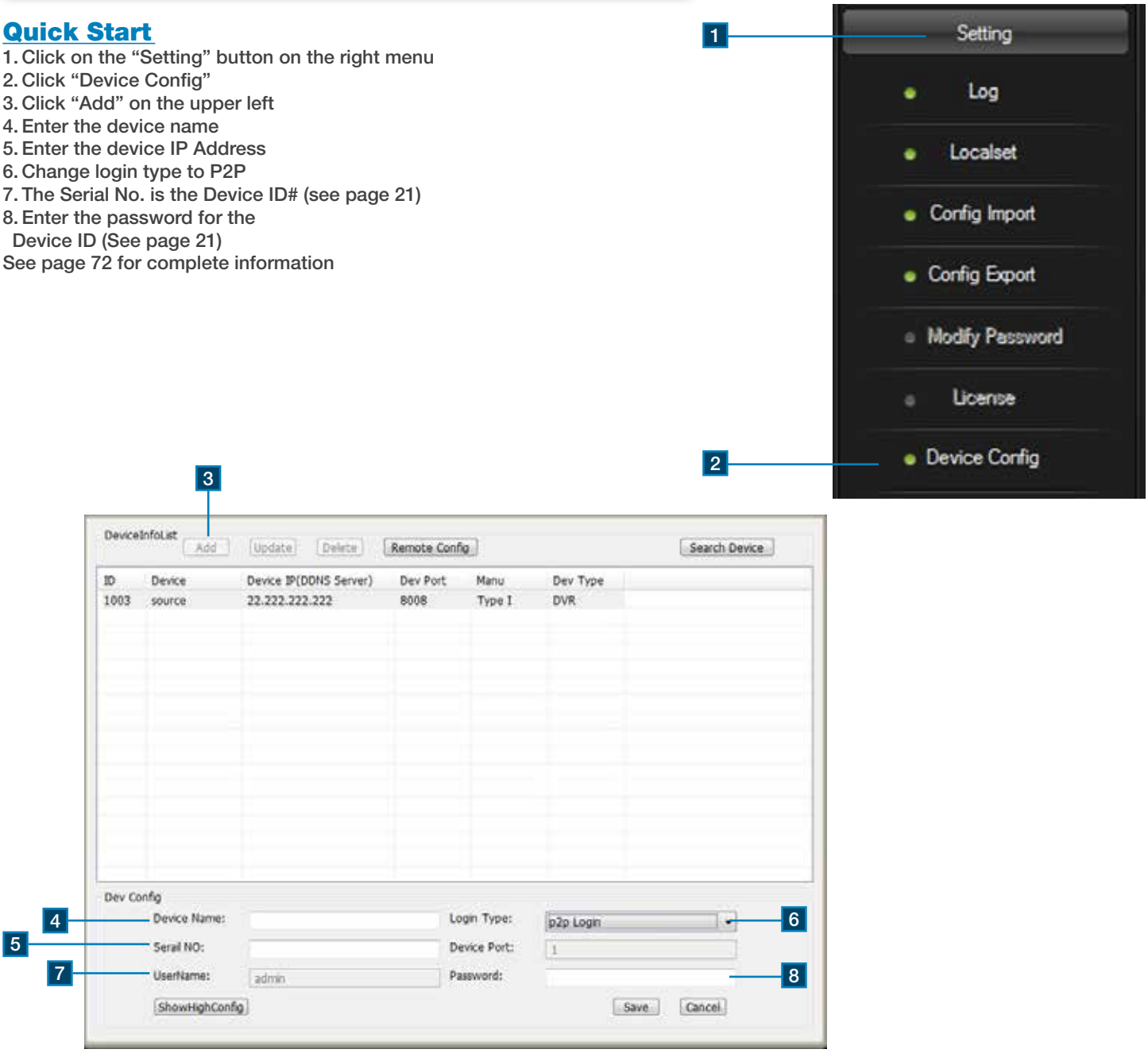
1. **Camera List:** Shows organizations, devices and channels
   Shows device IP, name and model
   Finish the TV wall output and video output in center
   Status icorns in record and live view mode
   Show the recording device status
   Begin record for talk
   Search information of device and channel
   Add to “Favorite”
   Record review
   Position to playback
   Time
   Reboot
   Log in / Log out (manually)
2. **PTZ Ctrl**: Control zoom
   Eight-direction control
   3D positioning, simulated joystick, etc
   Modify step, zoom, focus and Iris
   Preset: Configurate and execute presets
   Auto Tour: Configurate and execute auto tour
   Aux: Light, Aux1, Aux2, etc
3. **Monitor Project**
   Configuration and Execution
   Plan the task
   Pause/On the task
   Import/Export the documents
   The information of the project and task
4. **Setting**
   License: Functions authorization (license password is necessary for login)
   Local Set:
   Set the record path
   Set the download path
   Set the snapshot path
   Set the talk path
   Set the single file lengh
   Enable the talk saving
   Enable the display toolbar
   Show or hide the device name on EMap
   Minimum or maximum EMap size
   Set log number capacity
   Select media transfer protocal
   Select start screen numbers
   Set organization levels
   Multi-window configuration
   Auto task running
   Select system startup mode
   Set time period before turn to the playback
   Time verification interval
   Time verification disparity
   Display content when device running
   Language(Chinese/English)
   Screen display: OSD configuration
   Keyboard serial port configuration
   Admin config: config the organization,users,device,EMap and system
   Upgrade: software upgrade
   About: software version and copyright
   Admin Config
   Add/modify/delete the users or devices
   Add/edit the EMap
   System setting, I frame, log, authorization, password, DDNS setting.
   Input: Input the setup file
   Output: Output the setup file
   Modify Password: Modify license password or current account password
   License: For different users access for setting
5. **Custom Tool**: Playback the last alarm related video
6. **Status Display**: IP, manufacturer and working status information display.

Quick Guide

Quick Start

1. Click on the “Setting” button on the right menu
2. Click “Device Config”
3. Click “Add” on the upper left
4. Enter the device name
5. Enter the device IP Address
6. Change login type to P2P
7. The Serial No. is the Device ID# (see page 21)
8. Enter the password for the Device ID (See page 21)

See page 72 for complete information

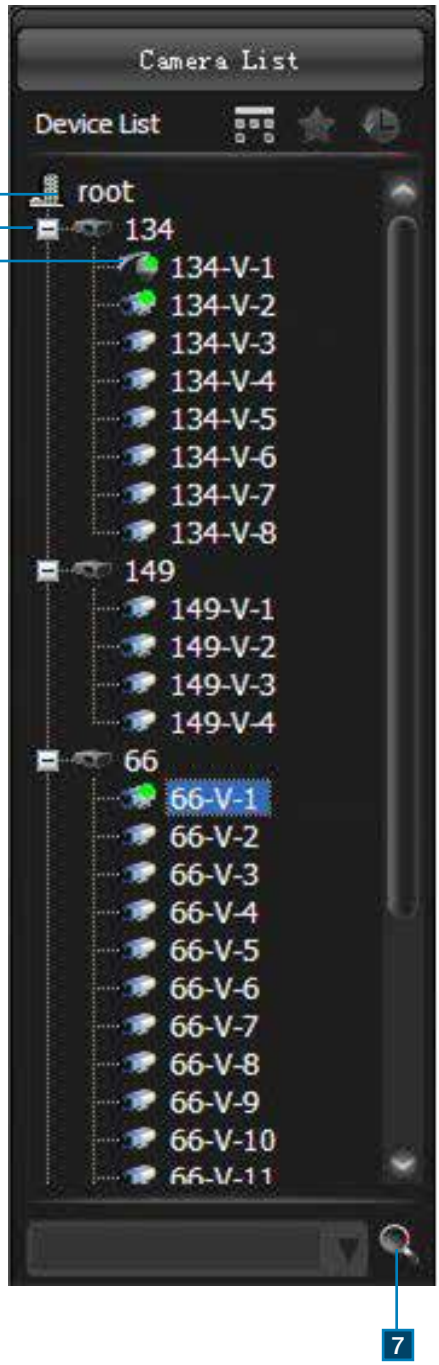


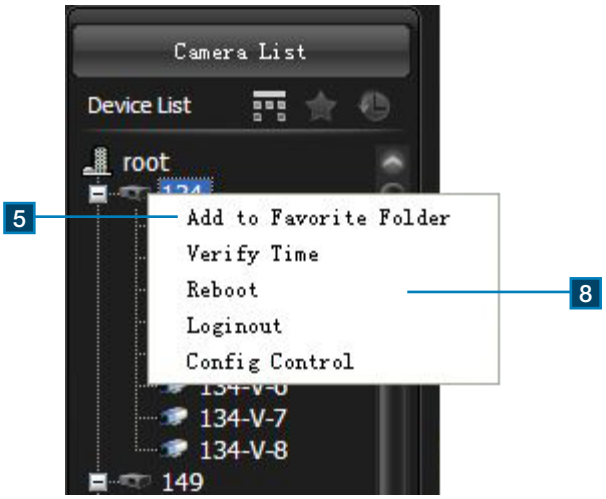
Functions

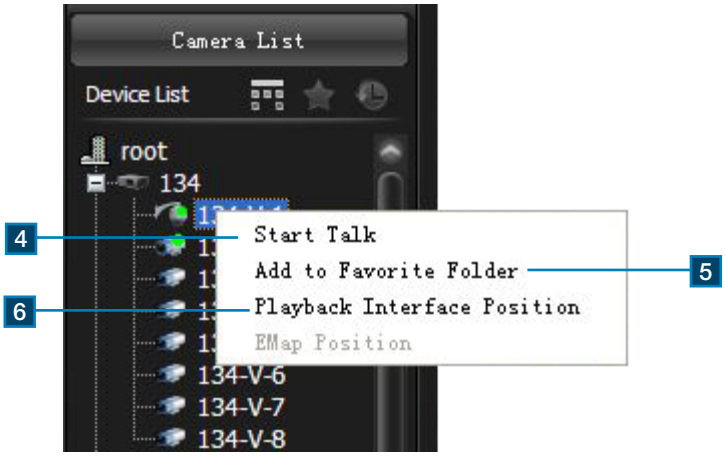
Camera List

Camera List shows the “Structure”, “IP Address”, “Device List”, “Favorite” and “History”.

1. **Node:** Click to open or close the sublist.
2. **Switch to live view:** Select a screen and double left click a camera to start the live view in this selected screen, or drag a camera/device/node to a screen to play. (see page 51)
3. **Device information:** move the mouse cursor to DVR or IPC to show the device information like IP, name, manufacturer and model.
4. **Start talk:** select a camera and enable the voice talk in context menu, click again to stop talk.
5. **Add to “Favorite”:** select a node/camera/channel and add to favorite in context menu.
6. **Playback interface position:** Select a camera and position it to the playback interface by context menu.
7. **Search:** input device name or IP to search
8. **Context menu:** Right click a device to execute the operations “add to favorite”, “timing”, “reboot”, “log in” and “config”







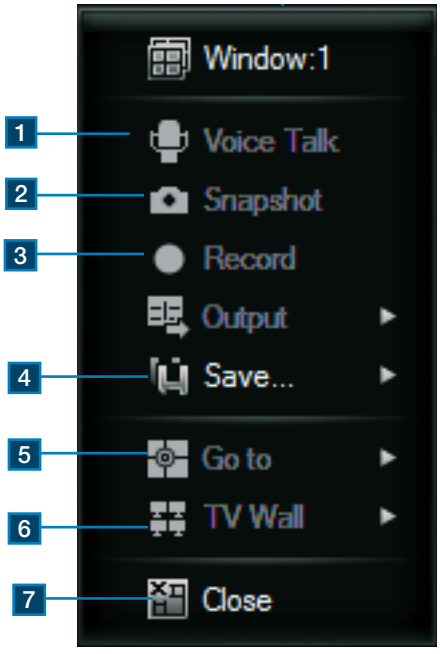
Live View

Play the live view in selected window or drag a node or a device to a window to play.

The device highlighted with a green spot identifies that this camera is in live view mode. Select a window, and the corresponding camera will be highlighted. Drag to change the screen position; double-click to maximize the image (single screen), double-click again to return to multiple channel view.

The options below will open when a channel is right-clicked on:

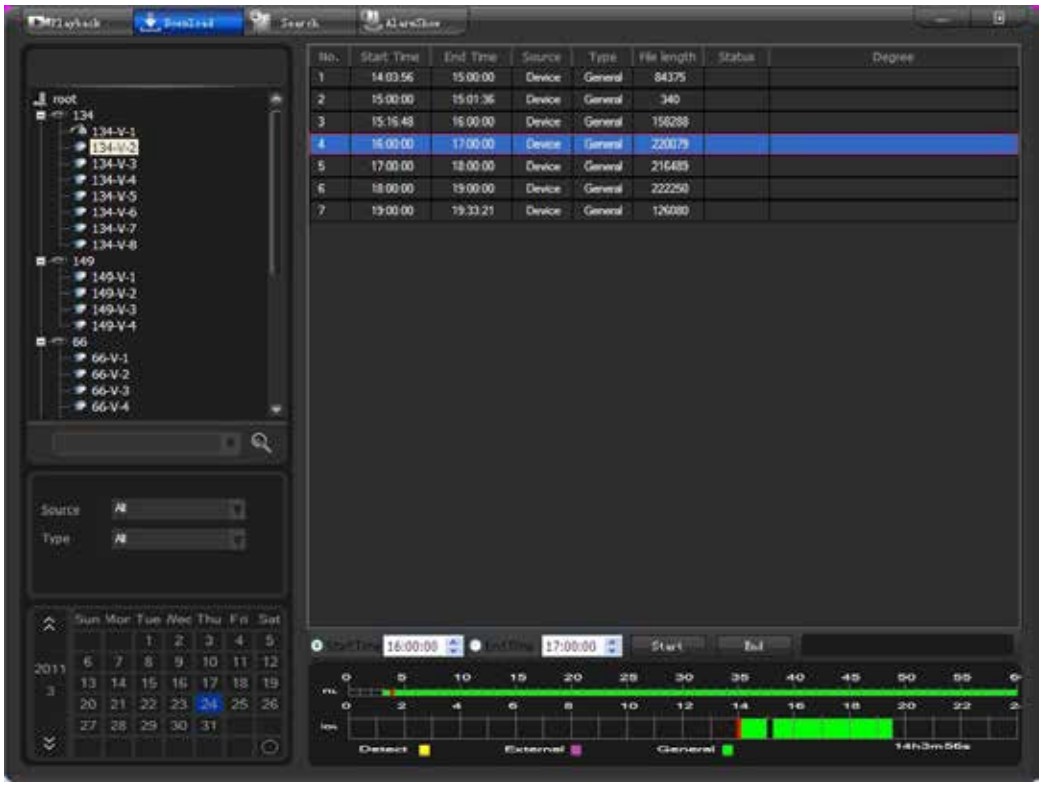
1. **Voice talk:** Start the voice talk(depend on the DVR function)
2. **Snapshot**: Snapshot in live image
3. **Record:** Save the video audio in local files Output. Set the output audio and color
4. **Save:** Save the current window and camera as one task group. Save the current video in “Favorite”
5. **Go to**: Position to playback or EMap
6. **TV Wall**: Send image to TV wall
7. **Close**: Close the selected window



Alarm

Download

Click the “Download” button (shown above) to activate the Download interface.
Select a camera in the device list first, then define the record “source” (all, device, platform) and “type” (all, external alarm, motion detect, general record), then double-click the recording date to get the search results list. Select the recording in the list directly or select by time. Right click or double-click to start the download.
Set the file path in the “Local Set” interface, the file format is “.dad”. Input the start and end time, click to download all the records in this period. Click to stop download.
Note: You can not download and play back a channel at the same time. The system will stop the playback automatically when you start downloading.



Search

Select a node or a camera in device list first, then define the “start time”, “end time”, “file type” (voice talk, local record, snapshot file, download file) and “user”, at last click “Search” to get the results in the right bottom list. You can play a recording by clicking “Play” button or double right click it. You can recycle play the video records but not the snapshot file.

Alarm Show

Select a node or a camera in device list first; then define the “date”, “start/end time”, “user”, “alarm type” (all, video loss,external alarm, motion detect, camera masking, device disconnection, host alarm) and “status” (not confirm, confirm); at last click “Search” to get the result list.

Alarm

The system supports six type alarms (video loss, external alarm, motion detect, camera masking, device disconnection and host alarm). As soon as an alarm occurs, the related device will automatically come to the front.

1. **Stop all relate:** stop all related alarms
2. **Import:** import alarm configuration
3. **Export:** export alarm configuration
4. **Confirm:** confirm the alarm and stop all related alarms

Click to change the device information format. Double-click a device to display all the sub channels. You can rank the list by “View” on top

5. **Left:** device list and alarm detail information
6. **Right:** device information

Right-click on the alarm icon or and preview the relates.
Right-click the blank to save the current status as an alarm task, or choose a rank type.
Bottom right is the event list. Click to deploy the event list,

Alarm configuration steps:

1. Task: There are 4 methods to set task. The task icon will be in green as you set the task.
2. Manually right click on the camera/device/node to enable or stop the tasks.
3. Select the alarm type in device list, e.g. set the task for all the devices and alarm type of “134” group.

4. Right click on the alarm icons, to enable or stop the tasks.
5. Set a task first and tick the items. This is the most convenient way to set the task.

Plan the time periods for different tasks.

After you set the task, global config and relate config, the alarm icons on screens will be in red as alarm occur. The alarm relates are:

4. Sound: enable the function and select a audio file (format: .wav)
5. TV wall: enable the function, the alarm video will be send to TV wall as the alarm occur.
6. Alarm interface: enable the function, the alarm interface will open as the alarm occur.

Relate the alarm video, support maximum 4 channels.

On the popup screen, you can find a voice talk icon to apply this function.

Note:

1. the on playing relate video corresponding with the flag alarm record.
2. double left click the alarm record to check the relate video when there are more than one alarms occur.
3. turn to the next or previous video by down and up icon.

Alarm Task Config

Click “Alarm”→ “Task Config” to launch the interface

Click “New” to name a task; then select devices for alarm task by button; at last save the configuration as a new task.

Click to edit and enable the alarm type.

Click “Delete” to delete a task. Introduction: the running tasks are still valid after you restart the system.

Alarm Plan Configuartion

Set plans to apply the tasks in particular time periods.

Click “Alarm” → “Plan Config” to launch the interface.

Plans will be automatically canceled when all the tasks are canceled.

Relate Configuration

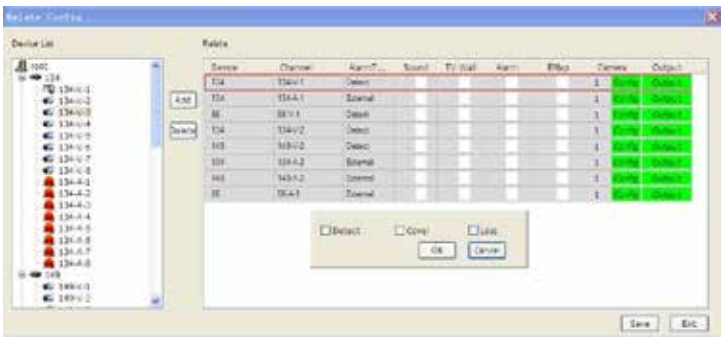
Click “Alarm” → “Relate Config” to launch the interface

Select the device in list and add it to the relate.

Tick the alarm type which include sound relate, TV wall relate, EMap relate and alarm interface relate.

Click the camera “Config” to open the window.

Click the “Output” to configurate the SMS output and talk output.

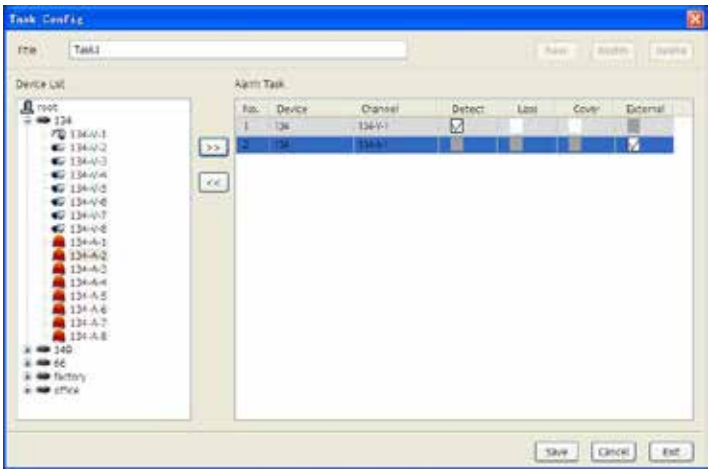


4. click “Confirm” to end the video relate.
5. double left click to full screen this window.

The alarm icon will show on the screen as the alarm occurs.

If you set the alarm in EMap, alarm indicators will open to indicate the location.

SMS output and talk output are selectable. Alarm notifications will be sent to your phone by SMS or be output by a sound device. You have to install DMSS and alarm output software for alarm SMS output.



Global Configuration

Click “Alarm”→ “Global Config” to open the following interface which include motion detect, cover, video loss, external alarm, host alarm and disconnection alarm.

1. **Audio:** enable or disable the function. You can select sound and set duration.The audio format is WAV.
2. **Video:** enable or disable the video relate. Set popup video duration.
3. **Assist (e.g. light):** enable or disable the assist devices and set the devices start time
4. **Alarm interface:** enable the popup alarm interface
5. **Output:** enable or disable the alarm output Introduction: global config aim to the whole system. You have to enable the alarm relate and then set the SMS and talk output.

Various Settings

Record
Click the “Record” in context menu to start recording, click again to stop the operation. Set filepath in “Setting” → “Local Set” → “Record”

Snapshot
Click “Snapshot” in context menu to save one single image of the video.
Path: Setting →Local Set →Record.
The default filepath: C:\Program Files\IMS200\PIC.
Saves in “.bmp” format

Color
You can modify brightness, contrast, saturation and hue in screen “context menu” → “Output” → “Color”
Note: This operations modifies the screen output, not the cameras.

Voice Talk
Select “Voice Talk” in the context menu to access the live sound, click it again to quit.

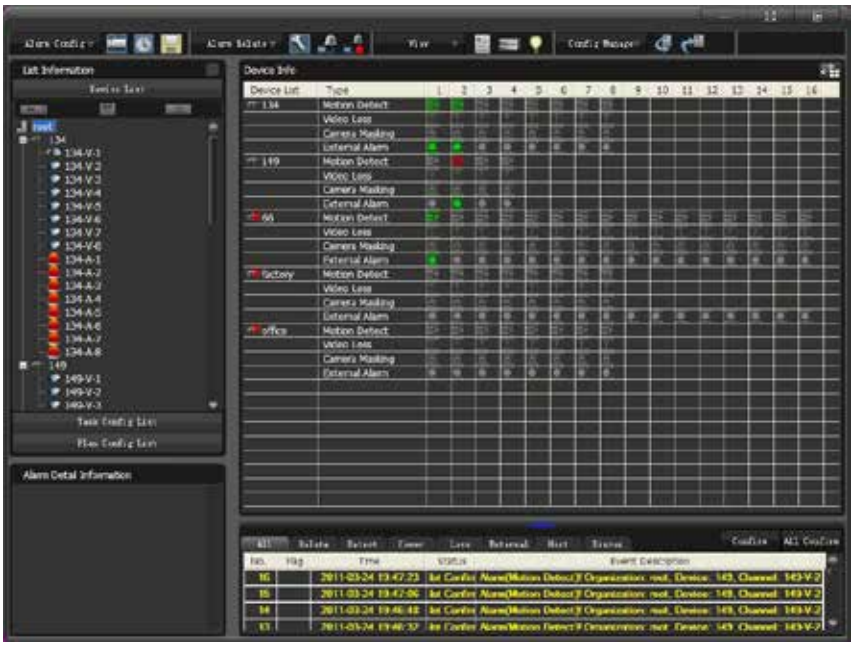
Go To
Playback: play 10 minutes before recording. (default is 10 mins, you can modify it in “Setting”→“Local Set” “Others”→“Playback Before”)
EMap: go to EMap location to which the camera belongs.

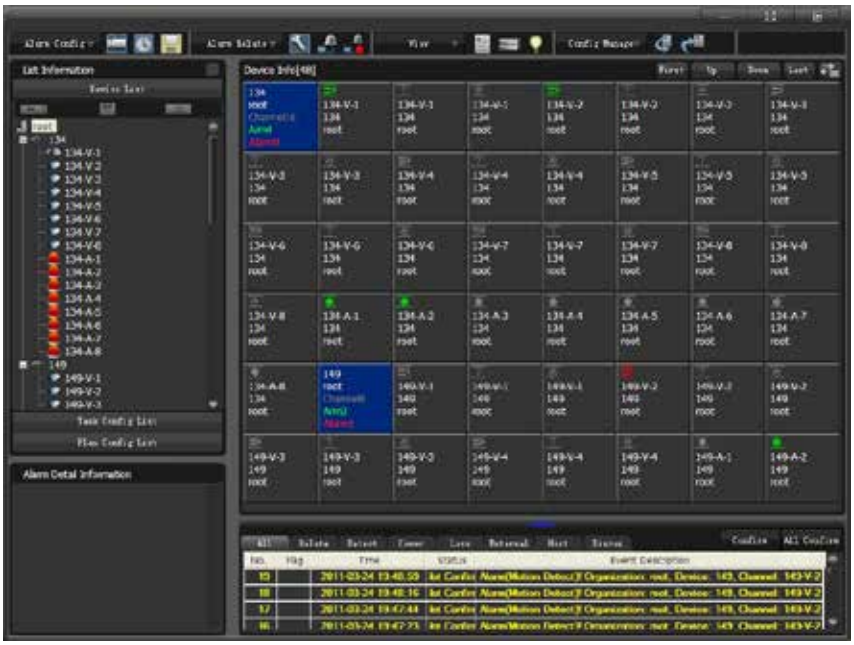
TV Wall
TV wall is supported.

Partition
Partition will divide the display in 1, 4, 6, 8, 9, 10, 13, 16, 20, 25, or 36 windows. **Note:** the default partition is 4 windows

Full Screen
Full screen icon
1. the right side toolbar open as cursor move into this zoom, hided as cursor move out.
2. the bottom toolbar open as cursor move into this zoom, hided as cursor move out.
3. click “Esc” to exit.

Close All Windows
Click to close all screens.

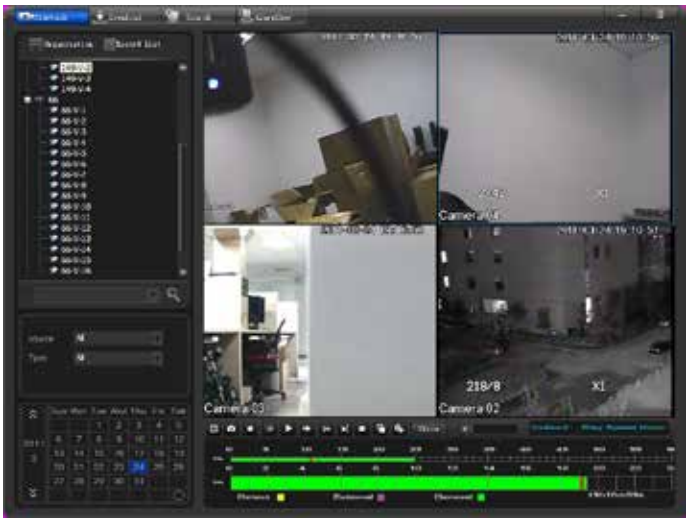




Recording Search and Playback

Playback

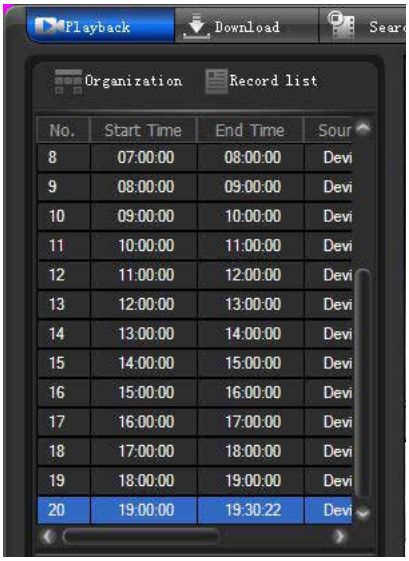
Click “Query” to open the “Playback” interface
Select a camera in “Organization”→select the “source” (all, device, platform) and “type” (all, external alarm, motion detect, general record)→double-click the date to list all records of that day (the time band with color refers the different record types in that period). You also can choose any time period by dragging.
Green: General
Yellow: Motion Detect
Purple: External Alarm
Select the hour and minute separately and play that record.
Click to synchronize four windows’ record time with the selected specific window.
Fast: 2, 3, 4, MAX times faster playback
Slow: -2, -3, -4, MIN slow playback
The record with colored blue is the one in playing.
Double-click a record in the list to play.
Double-click a window to switch to full screen mode and click again to return to the normal interface.



Slice

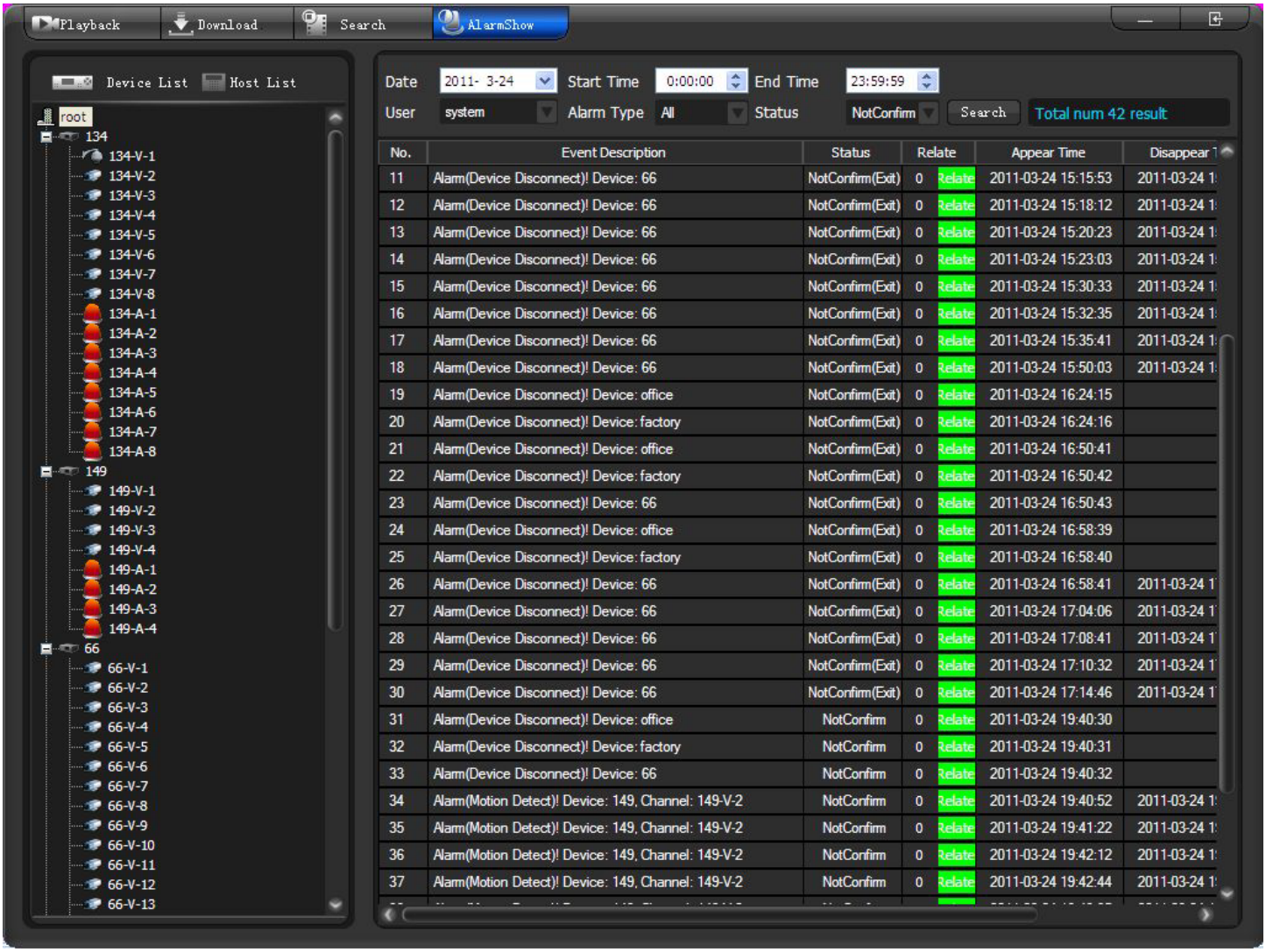
Click to modify a record, which has been found in the search function, in the following interface.

1. **Toolbar**: The operations include snapshot, pause, play, fast, slow, single frame and stop.
   Define the slice duration and its previous or after time period. There are 1, 2, 5, 10, 15, 20, 30 mins time length for selecting. **Note:** the slice toolbar function and operation are similar with the records playback toolbar.
2. **Bottom slice image:** Click to set the slice duration and previous or after time period. The system will automatically run the slice process accourding the setting.
   The first eight slice image will be displayed on the bottom. If the slice pictures are more than eight, there will be a floating arrow for scroll display.
3. **Side slice image**: Click image, the picture will be enlarged and display the previous and next slice image at the same time.
4. **Playback**: Double-click the slice image to playb ack the recording from the time point of the slice.
5. **Menu**: Exit the video slice and switch to playback, download, video search and alarm page.



Alarm

Select a node or a camera in device list first; then define the “date”, “start/end time”, “user”, “alarm type” (all, video loss,external alarm, motion detect, camera masking, device disconnection, host alarm) and “status” (not confirm, confirm); at last click “Search” to get the result list.


Playback
Download
Search
AlarmShow
Device List
Host List
root
134
134-V-1
134-V-2
134-V-3
134-V-4
134-V-5
134-V-6
134-V-7
134-V-8
134-A-1
134-A-2
134-A-3
134-A-4
134-A-5
134-A-6
134-A-7
134-A-8
149
149-V-1
149-V-2
149-V-3
149-V-4
149-A-1
149-A-2
149-A-3
149-A-4
66
66-V-1
66-V-2
66-V-3
66-V-4
66-V-5
66-V-6
66-V-7
66-V-8
66-V-9
66-V-10
66-V-11
66-V-12
66-V-13
Date 2011- 3-24 Start Time 0:00:00 End Time 23:59:59
User system Alarm Type All Status NotConfirm Search Total num 42 result
No. Event Description Status Relate Appear Time Disappear
11 Alarm(Device Disconnect)! Device: 66 NotConfirm(Exit) 0 Relate 2011-03-24 15:15:53 2011-03-24 1
12 Alarm(Device Disconnect)! Device: 66 NotConfirm(Exit) 0 Relate 2011-03-24 15:18:12 2011-03-24 1
13 Alarm(Device Disconnect)! Device: 66 NotConfirm(Exit) 0 Relate 2011-03-24 15:20:23 2011-03-24 1
14 Alarm(Device Disconnect)! Device: 66 NotConfirm(Exit) 0 Relate 2011-03-24 15:23:03 2011-03-24 1
15 Alarm(Device Disconnect)! Device: 66 NotConfirm(Exit) 0 Relate 2011-03-24 15:30:33 2011-03-24 1
16 Alarm(Device Disconnect)! Device: 66 NotConfirm(Exit) 0 Relate 2011-03-24 15:32:35 2011-03-24 1
17 Alarm(Device Disconnect)! Device: 66 NotConfirm(Exit) 0 Relate 2011-03-24 15:35:41 2011-03-24 1
18 Alarm(Device Disconnect)! Device: 66 NotConfirm(Exit) 0 Relate 2011-03-24 15:50:03 2011-03-24 1
19 Alarm(Device Disconnect)! Device: office NotConfirm(Exit) 0 Relate 2011-03-24 16:24:15
20 Alarm(Device Disconnect)! Device: factory NotConfirm(Exit) 0 Relate 2011-03-24 16:24:16
21 Alarm(Device Disconnect)! Device: office NotConfirm(Exit) 0 Relate 2011-03-24 16:50:41
22 Alarm(Device Disconnect)! Device: factory NotConfirm(Exit) 0 Relate 2011-03-24 16:50:42
23 Alarm(Device Disconnect)! Device: 66 NotConfirm(Exit) 0 Relate 2011-03-24 16:50:43
24 Alarm(Device Disconnect)! Device: office NotConfirm(Exit) 0 Relate 2011-03-24 16:58:39
25 Alarm(Device Disconnect)! Device: factory NotConfirm(Exit) 0 Relate 2011-03-24 16:58:40
26 Alarm(Device Disconnect)! Device: 66 NotConfirm(Exit) 0 Relate 2011-03-24 16:58:41 2011-03-24 1
27 Alarm(Device Disconnect)! Device: 66 NotConfirm(Exit) 0 Relate 2011-03-24 17:04:06 2011-03-24 1
28 Alarm(Device Disconnect)! Device: 66 NotConfirm(Exit) 0 Relate 2011-03-24 17:08:41 2011-03-24 1
29 Alarm(Device Disconnect)! Device: 66 NotConfirm(Exit) 0 Relate 2011-03-24 17:10:32 2011-03-24 1
30 Alarm(Device Disconnect)! Device: 66 NotConfirm(Exit) 0 Relate 2011-03-24 17:14:46 2011-03-24 1
31 Alarm(Device Disconnect)! Device: office NotConfirm 0 Relate 2011-03-24 19:40:30
32 Alarm(Device Disconnect)! Device: factory NotConfirm 0 Relate 2011-03-24 19:40:31
33 Alarm(Device Disconnect)! Device: 66 NotConfirm 0 Relate 2011-03-24 19:40:32
34 Alarm(Motion Detect)! Device: 149, Channel: 149-V-2 NotConfirm 0 Relate 2011-03-24 19:40:52 2011-03-24 1
35 Alarm(Motion Detect)! Device: 149, Channel: 149-V-2 NotConfirm 0 Relate 2011-03-24 19:41:22 2011-03-24 1
36 Alarm(Motion Detect)! Device: 149, Channel: 149-V-2 NotConfirm 0 Relate 2011-03-24 19:42:12 2011-03-24 1
37 Alarm(Motion Detect)! Device: 149, Channel: 149-V-2 NotConfirm 0 Relate 2011-03-24 19:42:44 2011-03-24 1

PTZ Control

Open the PTZ interface of authority camera to set step, zoom, focus, iris, preset, auto tour, aux and etc. Click “PTZ Ctrl” to open the toolbar.

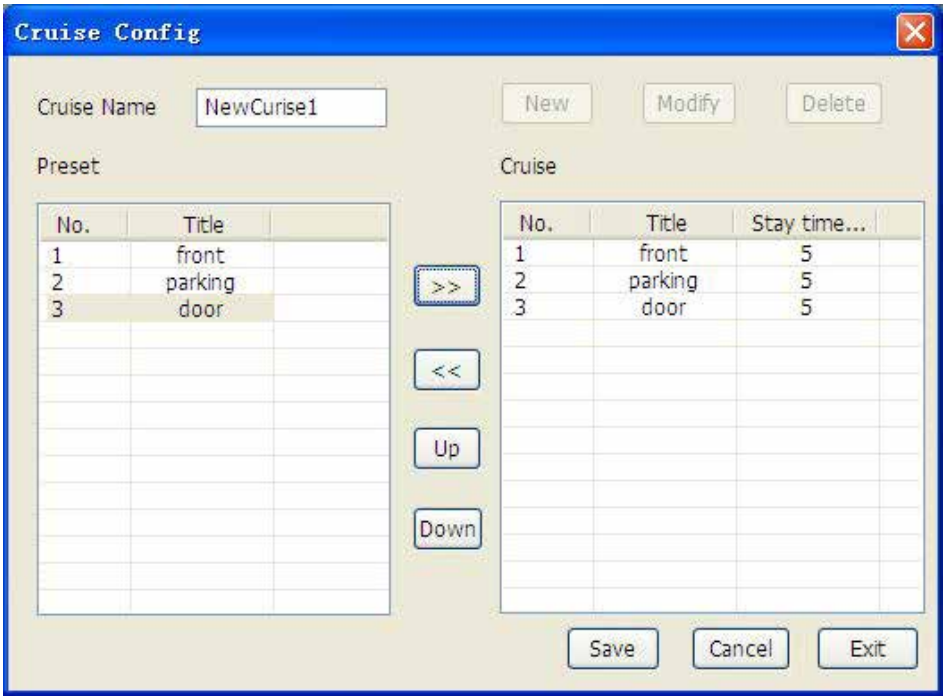
1. **Direction key 8 direction**: Control a connected PTZ camera movements
2. **Sit:** Single click on screen and position this point to the centre. Support 1-36 zoom in/out function. Enlarge the selected screen by dragging bottom-up. (only controlled by mouse)
3. **Simulate joystick:** Enable the function,control the step and camera movement by simulating a joystick with a mouse. Scroll wheel controls the camera zoom.
4. **Step:** There are 1-8 steps controlled
5. **Zoom:** Control the camera zoom
6. **Focus:** Modify the focus
7. **Iris:** Modify brightness
8. **Preset:** When Pan/Tilt moves to the target position, input the preset number and save it.
9. **Auto tour:** Auto tour lines
10. **Aux:** Light on,light off

PTZ Presets

Click “PTZ” → “PRESET” → “Setup” in menu to open the preset window. Input a preset number, name and save this preset.
Note: preset number is 1-128, the name could be in number, letter or symbol, the minimum length is 16 characters.
Select a preset and click “Delete” to cancel it.
Return to PTZ control, select preset from list, then click “Go To” to control the camera motion.

Auto Tour

Click “PTZ” → “CRUISE” → “Setup” to open the auto tour window (see below)
Click “New” to add tour.
Tour name, can be modified.



Monitor Project

The operations in monitor project include task and plan config; pause and resume project; import and export; run and stop tasks.

Task Configuration

"Task" is the sub item of "Save" in screen contact menu.
To add a new task, first input the task title and select the screen number (1,4,6,8,9,13,16,20,25,36), then select the node or device and add it into the task sub-item by clicking save to complete the operation.
All the channel information is listed in the task sub-item, like the device, channel, camera ID, stop duration (10-3600s), preset (1-128) and stream.

1. **New:** add a new task
2. **Modify:** modify the task configuration
3. **Stay time:** the default is 20 seconds. Double left click to modify the time between 10-3600 seconds.
4. **Preset:** double left click to add preset number
5. **Save:** save the configuration
6. **Cancel:** cancel the select item
7. **Exit:** quit this window

Note:
1. there are maximum 100 devices in one task
2. select a node to add all devices in this node into the task
3. modity one stay time and apply this time to all in context menu

Plan Configuration

Click "Add" and modify the plan parameter like title, task start/end time. You can put the exist tasks into the plan.
Add several tasks into one plan, set the start and end time to make a cycle execution.
Modify: modify the plan configuration
Delete: delete a plan
Exit: quit this window

There are a maximum of 100 tasks in one plan. In the monitor project interface, click the task to carry it out.
Pause: pause and resume the running project
Import: import tasks and plans list
Export: export tasks and plans list Introduction: the monitor project configuration is keep in local. Copy the configurations between devices by import and export data.

EMap

EMap is used for showing the alarm and device locations. The photo to the right shows the EMap interface
Upper left: Organize structure
Left bottom: Channel feed
Right: Map
There are camera icons, alarm icons and the next level map icons on the map window.
Double left click the next level map icon to turn to that map.
Single click the camera in organize structure to get the camera location on map. Double left click the camera in list or on map to play the live view in left buttom screen.

Double left click the screen to turn to the full screen mode; double left click again or press "ESC" to quit.
"PTZ Control" : control the camera motion
"Talk" : talk through channel device
"Send" : send the video to playback window
"Stop" : stop the video playing : minimize the map : full screen the map.
Note: zoom in/out with mouse scroll wheel

Tools

Device Status
"Dev State" shows the current stream, motion detect, camera masking, video loss, external alarm states.

User-defined Tools
Click in "Use-defined Tool" to check.

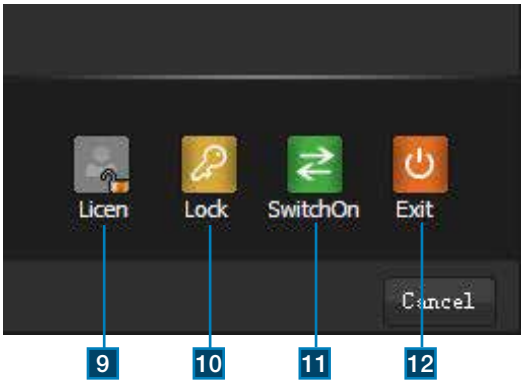
Device Running
1. hard disk status(√: enable, : disable)
2. memory (red: full, blue: enough space)
3. voice talk status
4. recording status
5. motion detect status
6. cover alarm status
7. loss alarm status
8. external alarm status

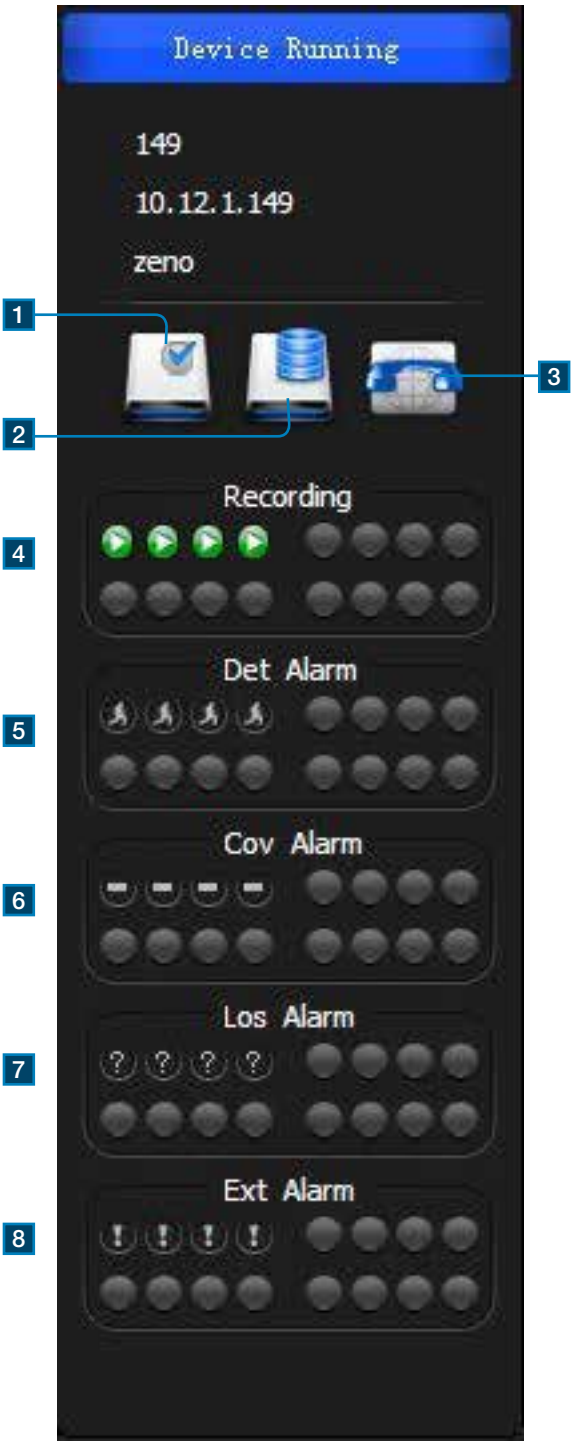
Minimize
Click to hide the interface

Full Screen
Click to switch to full screen mode.

Shutdown
Click to open the shutdown window.

9. **Licen:** get the licenced authority by inputting the password.
10. **Lock:** lock the system. You need the password to unlock it.
11. **Switch On:** the system will reboot as you click the "Switch On" button, then input the new username and password to login by the new account.
12. **Exit:** exit the system. Introduction: Allocate ahthority by the "system" account and reboot the system. You have no authority except live view monitoring in the first login. Set authority and password for further operation.





CPU & Network Status

1. **CPU:** wave range refers the CPU utilization
2. **NET:** refers net block

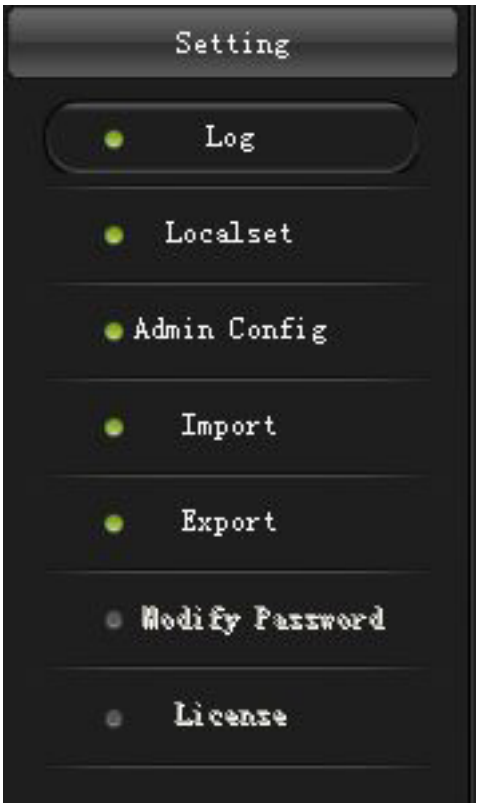
Date and Alarm Status

DATE & ALARM
Display the time, date, and alarms
Click alarm number to get the alarm configuration

ALARM
Click date and time to open the system log interface.

SYSTEM SETTING

There are local set, modify password, log, update, screen out, virtual keyboard, license and admin config options in “Setting.”

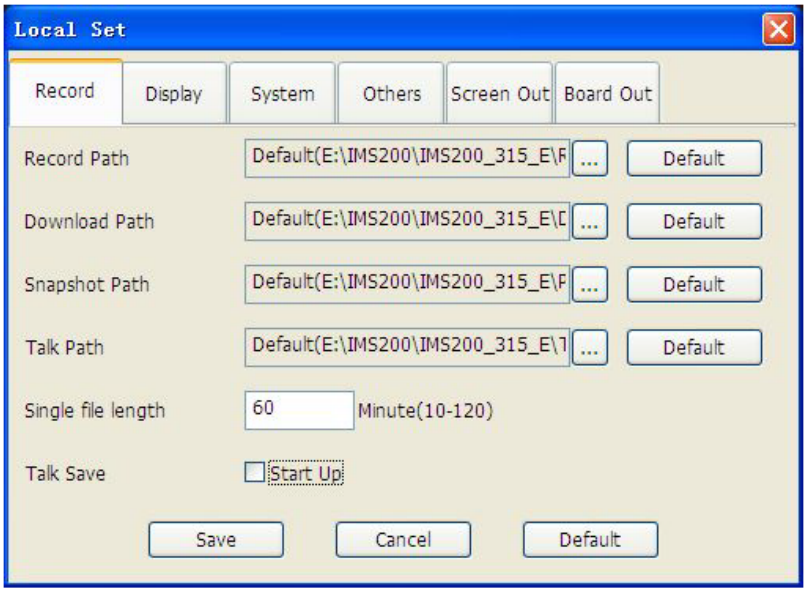


Log

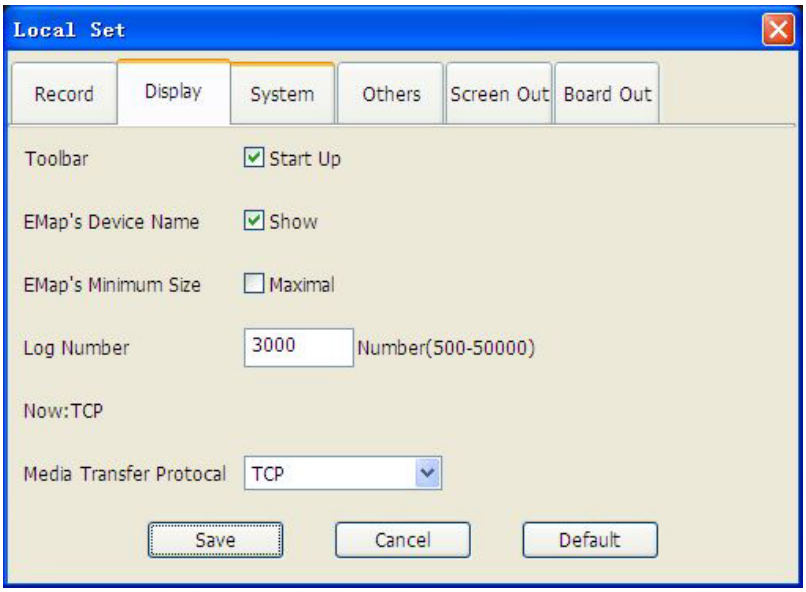
Log records the account event, operation and alarm information.
Search and download the records according its time, type, device and username in “LOG” interface.

Localset

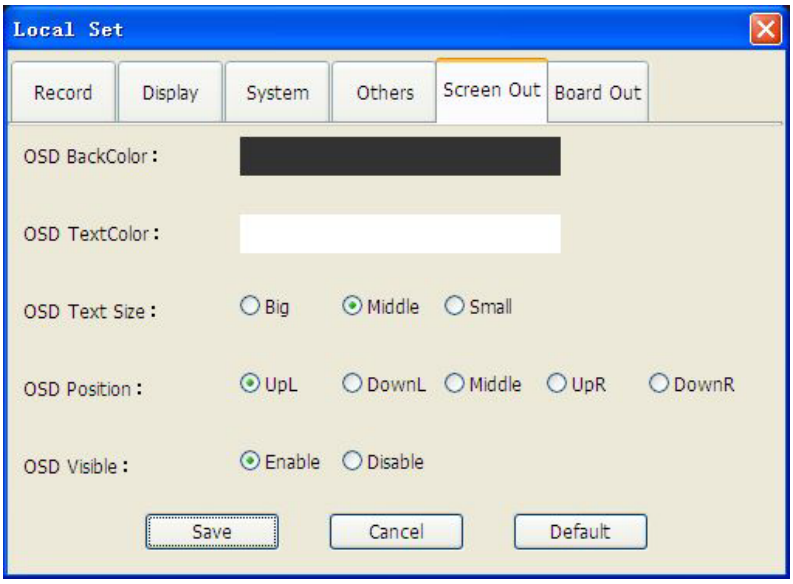
Record: modify record, download, snapshot and talk path, set the single file length and enable the talk save.

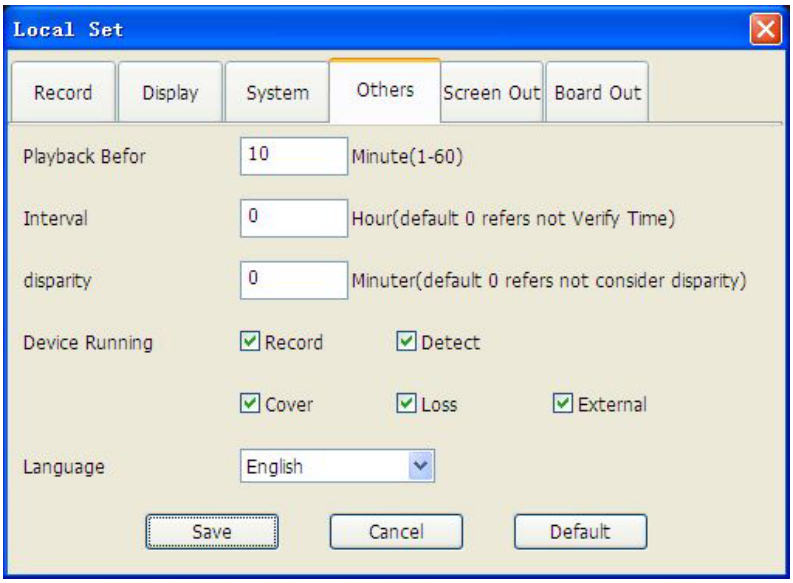


Display: enable the toolbar and EMap’s device name, set the map size, log number and media transfer protocal.



System: set start screen mode, organization level, multi-window config (main interface, query, EMap and alarm), auto task running config, and system startup mode.
Set the start screens as your requirement
Set the multi-level structure, like "country→province→city→street"
Enable the task auto running
System startup mode: full screen and exclusions are user adjustable
Multi-window config: adjust the appearance of a multiple channel display

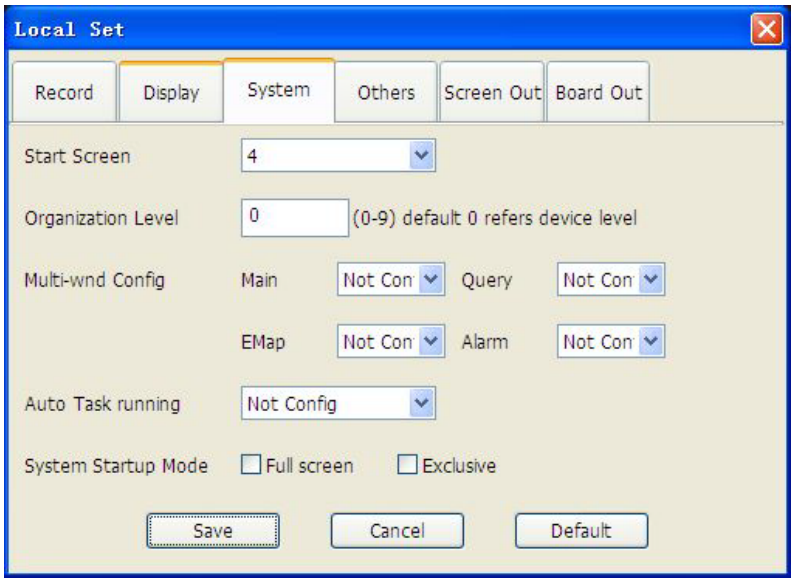


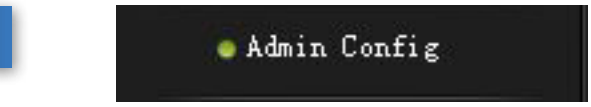


Others: set playback forward time, interval, disparity, device running and language.

Screen Out: To set the OSD background color and text color. Photo, right, shows the "Screen Out" interface
Click "OSD BackColor" and "OSD TextColor" to set color.
You can also set the "OSD Text Size", "OSD Position" and "OSD Visible.
If OSD is visible, the information will show on the upper left, see photo, above right.

Board Out/Virtual Keyboard:
For use with Network Keyboard



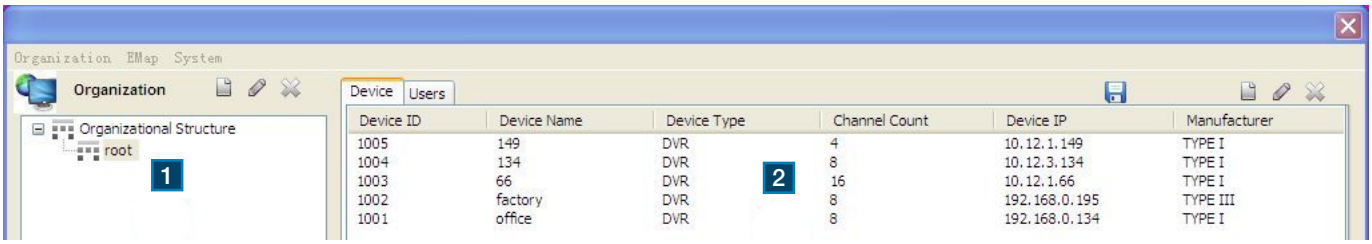


Users & Device

Click “Organization” to enter the following interface

1 Lists the organization structure. You can add, modify and delete nodes here and click a noke to open the sublist (only the administrator account has the authority to operate.)

2 Contains the users and device parts. You can add, modify and delete users and device here.



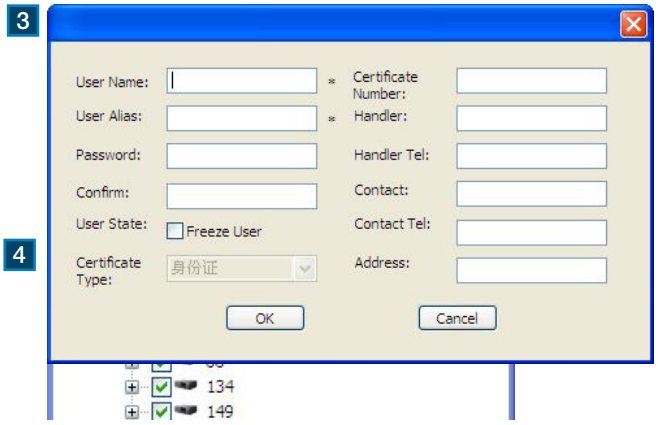
Users

Add: Select a node and click to launch (**3**). User information and settings can be added or modified

Modify: Select a user and click to modify user information

License: The “Device List” (**4**) will open when you select one user Tick the device or channel to in the list to authorize and click to save the modify.

Delete: Select a user or a device you want to delete and press



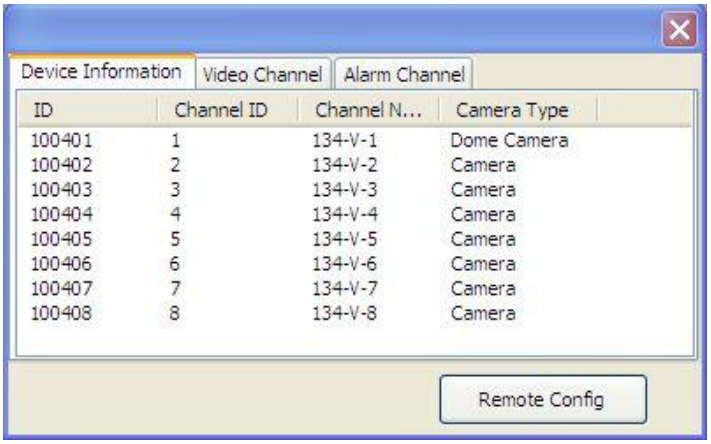
Device

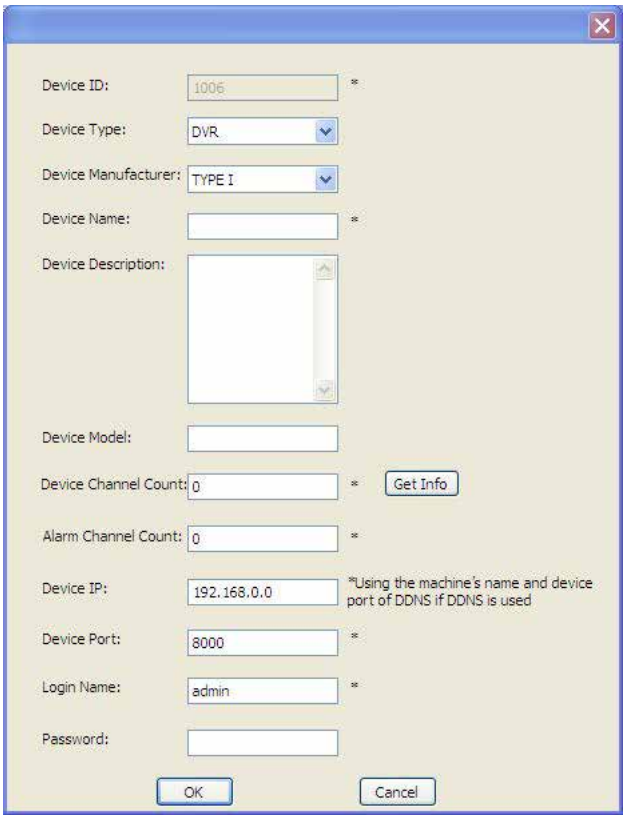
Add: Select an organization node and click to add device in this node. Input the device data in popup window and click to finish the process(the “Device Channel Count” and “Alarm Channel Count” are auto generate according to the device IP.).

Modify: Select a device and click icon to modify the information

Device Information: The interface which contains “Device Information” , “Video Channel” and “Alarm Channel” will open when you select a device.

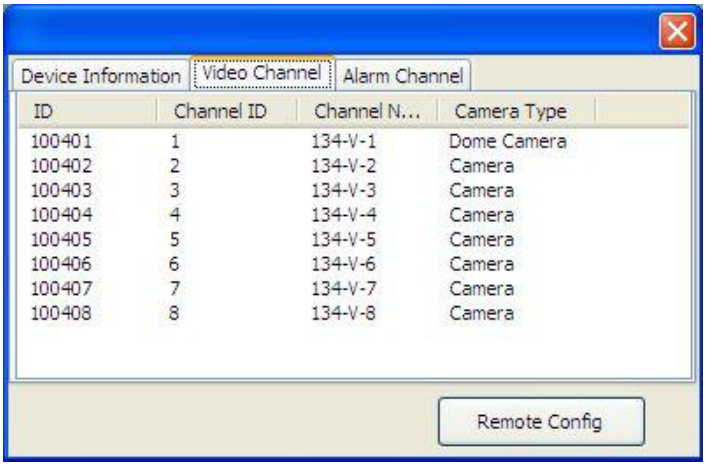
The “Device Information” interface



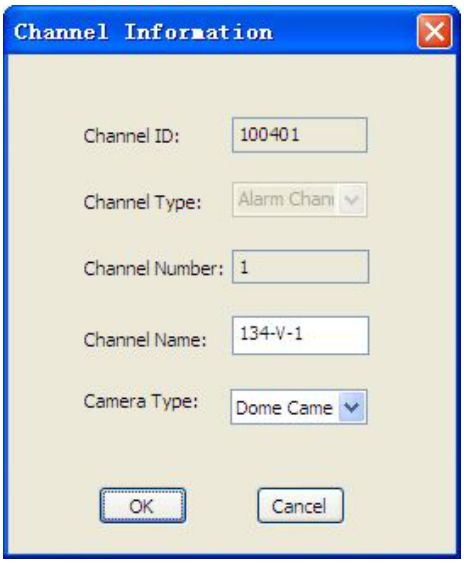


Admin Config (cont.)

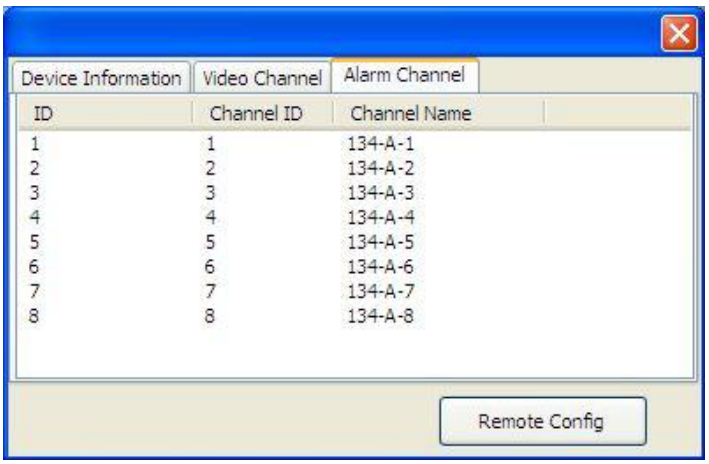
The “Video Channel” interface:



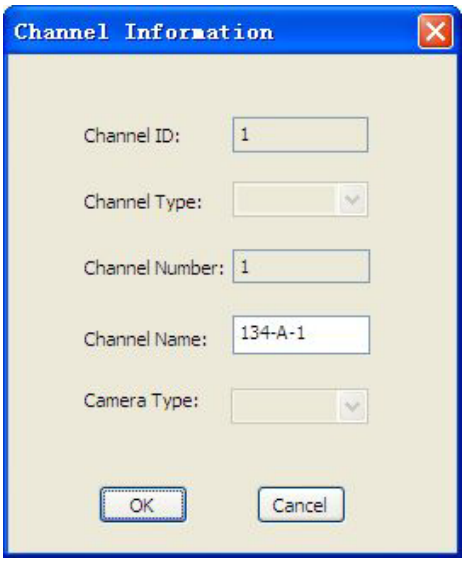
Double-click a channel to open “Channel Information”, You can modify channel name and type in “Channel Information” . The camera type includes camera, PTZ dome camera and dome camera.



The “Alarm Channel” interface:



Double-click an alarm channel to get a popup window. (see below)

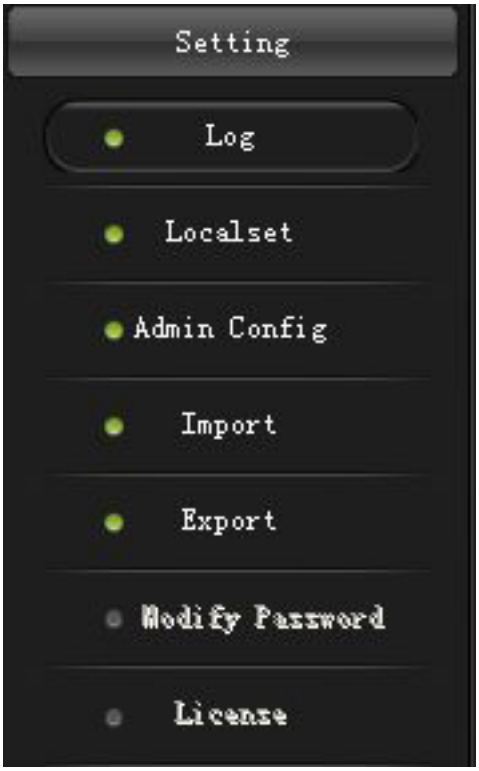


System

Click “System” to enter the interface. There are I frame, log, authorization, password and DDNS in system management module which is only showed by the “system” account login.
I frame: enable and insert an I frame when starting live view or playback for improving image resolution.
Log: log will be deleted as it exceeds the storage period limitation.
Authorization: users are allowed to operate in authorized mode.
Password: modify password for the “system” user

Import and Export

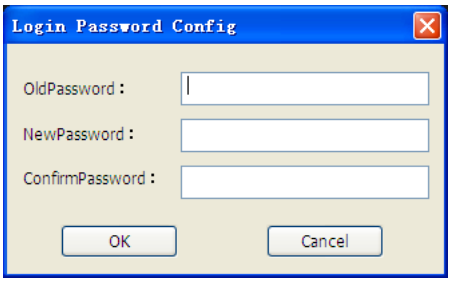
Modify the Input and output of dat, similiar to “SETTING” menu, including local set, admin config and log.



Password

1. In “Modify Password” interface, type in old password and enter new pasword and verify new password to modify. Modify the system password in “Setting”→“Admin Config”→“System”→“System Password”.

2. Modify authorization password by inputting old password and enter new pasword and verify new password to modify. Modify the authorization password in Setting→Admin Config→System→Authorization.

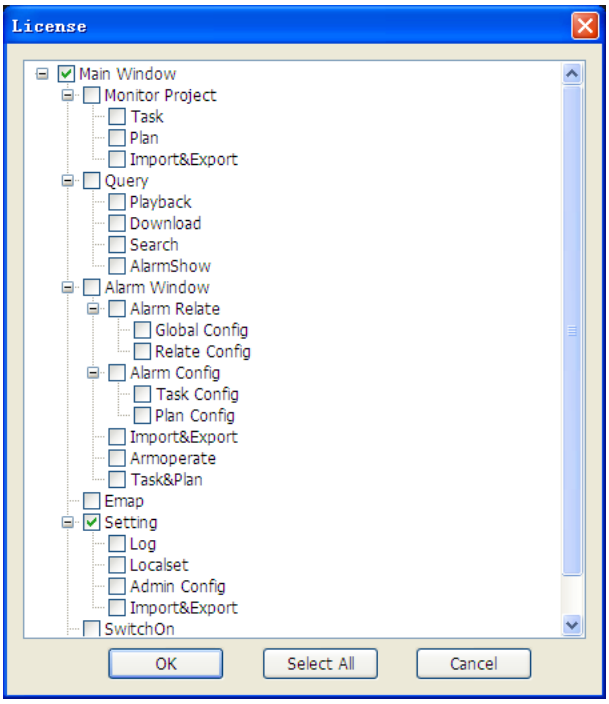


License

Click “License” to enter the interface as following

Set up users’ authority, including “task config” (task config, project config, import and export); “query” (playback, download, search and alarm show); “alarm” (relate config, global config, task config, plan config, config import and export), “EMap”, “setting” (local set, upgrade, log, admin config), “account switch” and “authority allocate”.

Note:
1. Enable the authority in “setting”→“config”→“system”. Restart the system to enable the configuration.
2. Set authorisation using top right icons. If an icon is greyed out, the action is not available.
3. Enable the authorization using top right icons.



Camera Settings

Channel: Select channel of the PTZ device

Ch name: Give the channel number a name

Main: resolution quality of camera -
CIF or D1 on 4/8 channel
Standard/Net Mode on 16 channel

Minor: Lower quality stream of camera-
Select QCIF, CIF or None.

PAL/NTSC: Default is NTSC

Audio: Turns audio on or off (only works if a microphone is installed)

Position: Changes the position of the date and time and channel number.
Select Left down,
Left up, or None.

Main size: Chose the size of the file for streaming. Size is by MB/H(megabytes per hour)

Minor size: Chose the lowest number of MB/H

Minor FPS: Choose the frames per seconded – higher the better

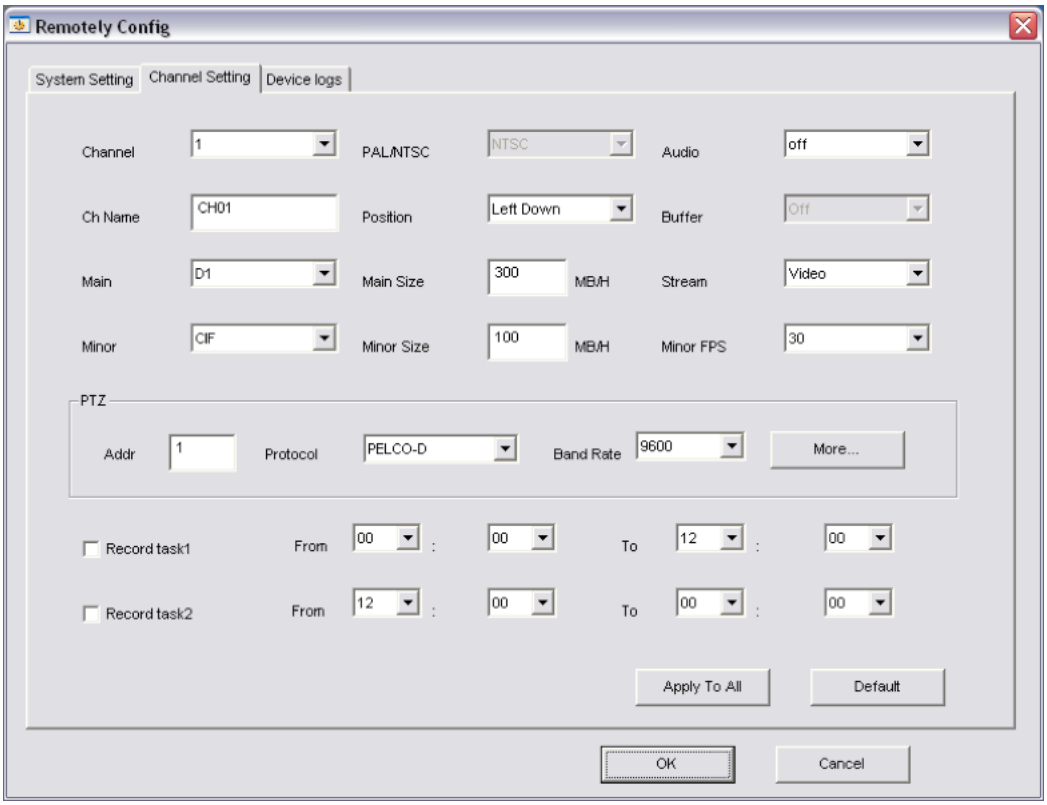
PTZ Address: Address of the PTZ camera

Protocol: Choose the protocol of the PTZ

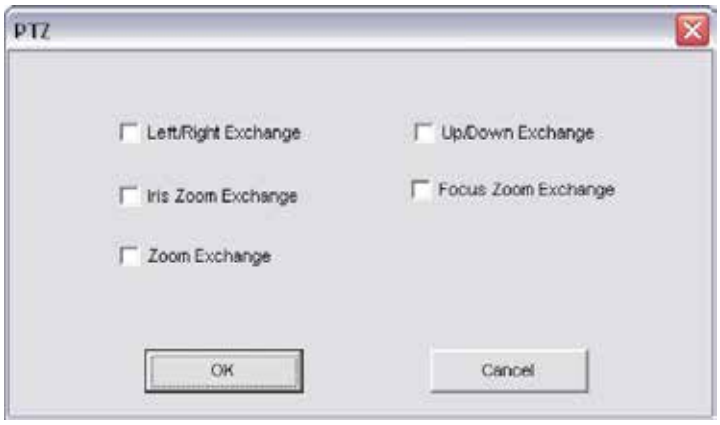
NOTE: ONLY compatible with pelco-D

Band Rate: chose the band rate of the PTZ

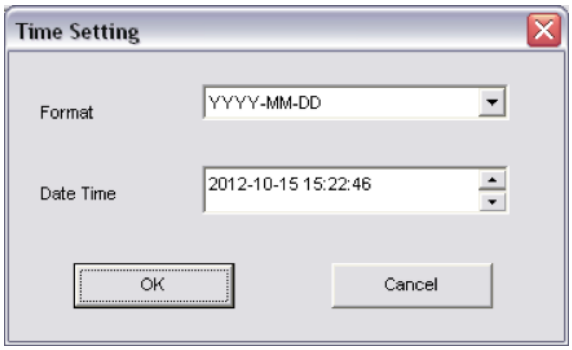
Record task: sets your scheduling recording



PTZ Options Screen



Device Logs Screen



DDNS Function

Summary

Dynamic DNS is a system which assigns an internet domain name to a variable IP address.
According to the rules of internet domain names, a domain name must be associated with a fixed IP address. Dynamic DNS provides a fixed Name server for the dynamic domain, and then guides the domain search to that IP address using a dynamic user through the Name server, which allows an outside user to connect with the dynamic user's URL.

VSSIP

VSSIP is a professional dynamic domain name analysis server embedded in this DVR. Please contact your dealer or agent for a DDNS account number. Click enable in the configuration window after getting the account number, and input the account number information.

CN99 (WWW.3322.ORG)

Register

Register New Users or Login at www.3322.org.
Click "My Control Panel" in the navigation bar.
Click "New" on the left side under DDNS.
Fill in the name of the host machine, the IP address will automatically detected. Leave the Mail Servers blank, and then click on the "OK" button.

DVR Settings

OpenMain Menu→Configuration→Network→Advanced→DDNS→Enable

Name	*Configuration*
DDNS	*CN99 DDNS*
IP	*Members.3322.org*
Port	*80*
Domain Name	*XXX.3322.org*
Username	*XXX*
Password	*XXXXXX*

After setting up the information as shown above, you can access the Embedded DVR via XXX.3322.org
Notice: The main machine's IP address should refer to the information on the website.

NO-IP (WWW.NO-IP.COM)

Register

Register a new user name at No-IP and click on "Create Account". Create a domain name and click on "Add a Host".

DVR Setting

OpenMain Menu→Configuration→Network→Advanced→DDNS→Enable

Name	*Configuration*
DDNS	*NO-IP DDNS*
IP	*dynupdate.no-ip.com*
Port	*80*
Domain Name	*XXX.XXX.org*
Username	*XXX*

Name	Configuration
Password	XXXXXX

DYNDNS DDNS (WWW.DYNDNS.COM)

Register

To login at Dyndns, register an account.
Click on the confirmation link, to log in to the account, click "Add Host Services" in "My Services" , set your own real name and then follow the directions.

Configuring the DVR

OpenMain Menu→Configuration→Network→Advanced→DDNS →Enable

Name	Configuration
DDNS	Dyndns DDNS
IP	Members.dyndns.org
Port	80
Domain Name	XXX.3322.org
Username	XXX
Password	XXXXXX

LTS DDNS (HTTP://NS1.DVRLISTS.COM/)

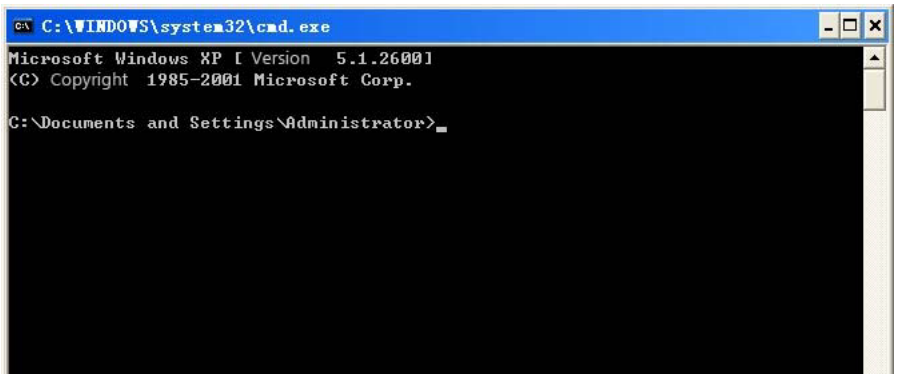
Register

To login at LTS DDNS, register an account.
Click on the confirmation link, to log in to the account, click "Add Host Services" in "My Services" , set your own real name and then follow the directions.

Configuring the DVR

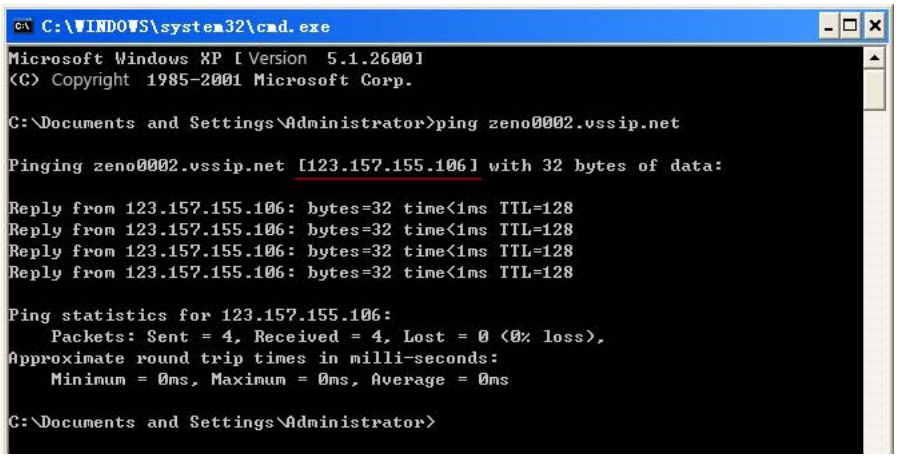
Open Main Menu→Configuration→Network→Advanced→DDNS→Enable

Name	Configuration
DDNS	LTS DDNS
IP	Members.dvrlist.com
Port	80
Domain Name	XXX.dvrlist.com
Username	XXX
Password	XXXXXX



Test and Verify DDNS

After configuring the Embedded DVR, wait for a few minutes to allow the analysis records to update.
Click on Operation in the menu, input "cmd" and click "OK" to open a command line window, as shown in below, Run Command Line Program.


C:\WINDOWS\system32\cmd.exe
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.
C:\Documents and Settings\Administrator>ping zeno0002.vssip.net
Pinging zeno0002.vssip.net [123.157.155.106] with 32 bytes of data:
Reply from 123.157.155.106: bytes=32 time<1ms TTL=128
Reply from 123.157.155.106: bytes=32 time<1ms TTL=128
Reply from 123.157.155.106: bytes=32 time<1ms TTL=128
Reply from 123.157.155.106: bytes=32 time<1ms TTL=128
Ping statistics for 123.157.155.106:
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
Minimum = 0ms, Maximum = 0ms, Average = 0ms
C:\Documents and Settings\Administrator>

Input "ping+ Domain name" then press Enter, as shown in The computer will analyze the domain name configured in the DVR, and return to the current IP address, as the graphic shows underlined in red. When the IP address corresponds to the embedded DVR's IP address in Public internet, it means the DDNS is set up correctly. If they are not the same, please check the network connection of the embedded DVR and the DDNS information.

Port Mapping

Port mapping is the mapping of a port outside of the web host's IP address to a machine inside the web, to provide service. When a user connects to the port of the IP address, the server will automatically map the request to the corresponding machine on the LAN.
With the port mapping function, many ports of one machine's IP address can be mapped to different machines and different ports on the web. Port mapping can also have other special functions, like POP, SMTP, TELNET, etc.
For example, if we want to map a web server which has an IP address of 192.168.111.10, we just need to input the IP address and TCP port 80 into the port mapping chart of the router.
There are two methods to map a port, automatic and manual. The UPnP function automatically maps the port and modifies the router's port mapping chart.

UPNP (Auto) Function

In order to get a connection to the DVR through a Public network, we need to set the Router to cross the NAT of the DVR. UPnP can make the NAT cross automatically via the UPnP agreement of the DVR, and you don't have to set up the Router.
Note: To use the UPnP Function, there must be Router support and be able to set up the UPnP Function.

1. Connect the Router to the network, access the Router's configuration menus, set up the Router and
enable the UPnP Function.
Routers from different manufacturers may have some differences, please refer to the specific router's instructions before setting it up.
2. Connect the DVR to the Router. The configuration will automatically connect to the IP address or static IP. After setting up the IP address, click the Advanced Configuration and navigate to the menu with ports and multicast etc. Enable "UPnP port mapping"
3. Enter the Router management interface. Detect the port if there is already Port Mapping. If there is, it shows that the UPnP set up is finished.
4. Input the IP address in a web browser such as Internet Explorer, and add the port number of the DVR, for example: 155.157.12.227:81. If you want to enter by the Client Software, use the TCP port offered by the outer network.
Note: If there are a few DVRs that need to be set up via the UPnP function, in order to avoid IP conflict, set the ports of the embedded DVR to different port numbers. Otherwise, it will choose a previously set up DVR port as the first choice.

Manual Port Mapping

1. Connect the DVR to a Router and set up a static IP address.
2. Log in to the Router, access its configuration menu, and enter the required settings. Then go to the port, set the IP address distributed by the DVR, and set the rules for port mapping, add the HTTP and TCP ports to the mapping list. The default access ports of the DVR include HTTP port 80 and TCP port 8000, if the ports are occupied by other devices; please modify the default port of the DVR to other vacant ports.
3. Input the public net IP address into the web browser, and add the port number of the DVR you want to access after the IP, for example: http://155.157.12.227:81. If you want to access it via Client Software, you can use the outer network TCP port directly.
Notice: For detailed configuration settings, please refer to the your router user manual.

NTP Function

The NTP function handles time synchronization between the DVR and the GPS clock server to ensure the accuracy of both devices.

Internet Configuration

CONFIGURATION→NETWORK, select "Advanced", then select "NTP" to configure. After accessing the Internet, the NTP function can use a standard NTP server to automatically set the time. Enter the IP address and domain name of an NTP server.
To activate the NTP function, click "Enable".
You can select how often the DVR will update its clock setting. The interval options are from 1 to 65535 minutes.

Intranet Configuration

If the DVR is connected to an intranet, the user can use a privately-owned server as the clock source. Enter the private NTP server address in the DVR's NTP configuration (as noted above) to set it as the clock source.
Privately-owned NTP servers can use standard NTP products to provide accurate time setting from a PC system. Please refer to the instructions below when using a PC system as an NTP server.

NTP Server Set Up under Windows

"Start" menu→"Run", input "regedit" to enter the registry editing feature.
Build a new key assignment of DWORD Value by going to: HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\W32Time\Parameters\registry sub key (NtpServer); Change the value to 1, and save.
Restart the computer.

NOTE: changes to Windows registry must be done carefully and only make the changes as noted above. It is best to always make a backup of your registry before attempting any changes.

NTP Server Set Up Under Linux

Due to the differences between Linux distributions, for details on how to set up an NTP server under Linux, refer to the manual for the distribution you are using.

PTZ Control

From the live screen, right click and select “P/T/Z Control” on the control channel, as shown

P/T/Z CONTROL

From the P/T/Z control menu, you can set direction step length, zoom, focus, iris, advanced features, auxiliary features, and camera settings.
Step size controls P/T/Z direction and speed, e.g. step size 8 is faster than step size 1. (Range 1-8, 8 is the maximum)
Click and for zoom, focus and iris modification.
There are eight directional controls: up, down, right, left, upper left, upper right, lower left, lower right.
(The front panel control only uses 4 directions).
Quick location: Use the <SIT→ button in the middle of the directional arrows; make sure the protocol supports this function and use only mouse control. Click any point and the P/T/Z camera will turn to it and move it to the center of the screen.
Drag the mouse to find the location page, it supports 4 ~ 16 times variations, drag from top left to bottom right to zoom in, drag from bottom right to top left for zoom out.

Advanced Functions

Click “Page Switch” to switch to the advanced functions, as shown

1. **Preset**: Enter the desired previously configured Preset number in the number field then click the Preset button to select it.
2. **Tour:** Enter a Tour number in the number field and click on the “Tour” button to run it or stop a tour using the “Stop” button.
3. **Pattern:** Enter a Pattern number and click on the “Pattern” button to run it. The camera will follow the set patrol path. Right click to hide the menu. Click the directional key in menu to stop the patrol.
4. **Auto Scan:** Click “line” calls for the line scan function as per set line to scan, the button will turn into “Stop”, if you want to stop the motion, click it.

AUX

Click “Page Switch” to enter the AUX interface. (Corresponding with protocol)

P/T/Z SETTINGS

Click “Set” to set Preset, Tour, PatternandBorder. Grayed out keys represent unsupported functions (5-6 Preset setting).

1. **Preset:** (5-6 Preset setting) it sets up camera positions using the directional keys. Click “Preset” and input a Preset number then click “Set” to save the coordinates to that Preset number.
2. **Tour:** Select “Tour”, as shown in 5-7 Tour, input numbers into “Patrol No.” and “Preset”. Click “Add Preset” to add a preset in the cruise path, repeat to add more presets. Click on “Delete Preset” to delete a preset, repeat to delete more (clearing presets cannot be supported by some protocols.)
3. **Pattern setting:** click “Pattern”, as shown in 5-8 Pattern, record the process as Pattern “X” (a number), click on “Begin”, go back to the P/T/Z control menu to modify the “Zoom”, “Focus” and “Iris” settings, etc., then back to the menu below to “End”.
4. **“Border setting:** Click “Border”. Move the camera to the left and right boundaries (furthest range of motion) using the directional keys and click on “Left Border” and “Right Border” respectively to confirm the settings.

P/T/Z CAMERA SETTINGS

Click “Page Switch” to access the camera setting interface (only supports part of the protocol).
“Enter Menu” and “Exit Menu” access or quit the camera settings menu.
Click “Page Switch” to get back to interface as shown in P/T/Z control. The directional key is mainly used for internal menu control, i.e. the camera menu control. Grayed out buttons indicate an unsupported function.

Note: The Up/Down arrows change menu item selections while the Left/Right arrows change menu options.

Voice Intercom

Summary

The Voice Intercom function enables the DVR bidirectional communication: The User can talk and listen using the provided remote client software or over the Web via the DVR’s audio input and output ports.
There are two types of bidirectional communication, sharing and standalone. These vary by model.
Please refer to your DVR specifications to determine which is supported for your model.

Configuration

Local Configuration

Connect a microphone to the MIC input port and connect a pair of speakers to the audio output port. If there is no standalone MIC input port, please connect a microphone to the Number 1 audio input port.
Note: The audio needs to be connected to a powered audio output device.

Remote PC Configuration

Connect a microphone and powered speakers to the computer. Enable bidirectional communication in the client software or the Web interface.

Network Setup for Remote Access

Use the NETWORK SETUP menu to configure your network and DNS settings for remote access. If you are only going to access the DVR locally from a computer attached to the same router as the DVR, you only need to configure settings using either the DHCP or STATIC IP. Because you are on the same network, port forwarding and knowing the public IP address are not necessary. You will just access the DVR by entering the IP address of the DVR from the NETWORK setup into the Internet Explorer browser window. If you are going to take advantage of the Remote Surveillance feature, such as for a smart phone or to view your system outside of your network over the internet you will need to review and set up Port Forwarding and the DDNS. After you setup the NETWORK settings using DHCP , STATIC IP or DDNS, see the REMOTE SURVEILLANCE section for further instructions.

There are five options for configuring the DVR to be accessed remotely: DHCP, Static IP, UPnP, PPPOE, and DDNS. To access this menu, from the MAIN MENU click ADVANCED then NETWORK SETUP. Be sure your router or network is connected to the LAN port on the back of the DVR

DHCP (Dynamic Host Configuration Protocol)

DHCP is a protocol used by networked devices (clients) to obtain various parameters necessary for the clients to operate in an Internet Protocol (IP) network. It allows you to quickly connect to your network and obtain an IP address from the router. After the initial setup, we recommend that you disable DHCP, then select STATIC from the TYPE drop down box and set the IP address between 1~100. For example, if your IP address is 192.168.0.107, change the last digits to 90 (i.e. 192.163.0.90). This ensures that port forwarding will not change in the event of power failure or resetting of your network.

To configure DHCP settings:
1. Select DHCP from the TYPE drop down box in the NETWORK SETUP Menu. You should see the message "Getting IP..." The router will assign an IP address. This is the IP address you will forward port 80 to on the router so you can access the DVR from remote computers See comment above to configure a static IP.
2. Click APPLY. Click OK in the confirmation window.
3. If necessary, change the Media and Web Port settings

Static IP

You will need to setup the network settings on the DVR to match the settings of the router to which your DVR is connected. This information can be obtained through your computer. Windows 7, Windows 8, Vista or XP all have similar ways to access this data.
To get the router settings:
1. To access the router's settings you will need to enter the Command (CMD) panel on your computer. It must be connected to the same router as your DVR.
• In Windows 7, 8 or Vista, from the "START" menu type "CMD" in the field that says, "Search programs and files" and hit ENTER or click on the magnifying glass icon.
• In Windows XP select "Run" from the "START" menu. Type "CMD" after the prompt
2. Type "ipconfig" at the prompt and hit enter
3. You will get a screen that contains information similar to what is shown below. Within all of the information shown, locate the IPv4, Subnet Mask and Gateway addresses. These you will enter into the STATIC IP screen in the NETWORK SETTINGS menu in your DVR. See next step.
To configure Static IP settings in the DVR:
1. Select STATIC IP from the TYPE drop down box in the NETWORK SETUP Menu.
2. Enter your IP Address, Subnet mask, and Gateway info you obtained from your computer through the previous step in the respective fields using the Virtual Keyboard.
3. Click APPLY. Click OK in the confirmation window.
4. If necessary, change the Media and Web Port settings

UPnP (Universal Plug and Play)
UPnP Forum is an industry initiative designed to enable simple and robust connectivity among consumer electronics, intelligent appliances and mobile devices from many different vendors. This protocol is designed to allow networked devices, such as computers, printers, mobile devices to automatically discover each other's presence on a network and to connect seamlessly for data sharing and communications.

NOTE: Your Router must support UPnP function to use this protocol.
To configure UPnP settings:
1. Enable the UPnP function in your Router.
2. In this DVR, Open the MAIN MENU and click ADVANCE.
3. From the Advanced Setup menu, click NETWORK.
4. Under UPnP, select ENGAGE.
5. Click OK.
6. Using a remote PC, open Internet Explorer.
7. In the address bar, enter your Router WAN IP address immediately followed by WEB PORT (no spaces). Example: http://XXX.XXX.XXX.XXX(Router WAN IP):XXX(WEB PORT)
8. Enter your system ADMIN password and select INTERNET. NOTE: If you have not enabled passwords on the system, leave the password field blank.
9. Click LOGIN. PPPoE (Point-to-Point Protocol over Ethernet)
The Point-to-Point Protocol over Ethernet (PPPoE) is a network protocol for encapsulating Point-to-Point Protocol (PPP) frames inside Ethernet frames. It is used mainly with DSL services where individual users connect to the DSL modem over Ethernet and in plain Metro Ethernet networks. Use this option if you are going to attach the DVR directly to a DSL or Cable modem instead of a router.
To configure PPPoE settings:
1. Select PPPOE from the TYPE drop down box in the NETWORK SETUP Menu.
2. You will need to contact your ISP provider for the user name and password need to enter into the PPPOE NAME and PASSWORD fields.
3. Click LOGIN.
4. If necessary, change the Media and Web Port settings.

Network Setup for Remote Access (cont.)

DDNS (Dynamic Domain Name Service)

A DDNS account allows you to set up a web site address that points back to your Local Network so you can access the DVR over the Internet using a static or dynamic IP address. One problem with a dynamic address is your internet service provider (ISP) changes this address from time to time. When it changes you need to re-configure your DVR with the new address. To do so you will have to get the new IP address. Although you can go to www.myipaddress.com to get the new IP address, you still have to make the changes manually. So what are your choices? The first would be to obtain a static IP address from your ISP. Check with your ISP for availability and pricing. An alternative choice is to utilize a dynamic domain name service (DDNS) to get a domain name that can be linked to your dynamic IP address.

While there are multiple free DDNS services available, we recommend www.dyndns.com as the DVR has been already configured to accept account information from this service.

How DynDNS.com works:

1. You install the DynDNS® Updater software on your network
2. When your Internet Service Provider changes the your IP address, the DynDNS Updater detects that the network's IP address has changed
3. The DynDNS Updater sends the new IP address to DynDNS.com
4. The DynDNS.com update server receives the information, and assigns the new IP address to your Dynamic DNS hostname you created.

In addition to automatically keeping up with the changes in the address, you will now be able to enter a domain name rather than a string of digits when accessing the DVR in Internet Explorer.

How to obtain your Domain Name from www.dyndns.com

1. Using a computer that is connected to the same router as the DVR, use Internet Explorer to go to www.dyndns.com
2. Decide whether you only need one domain name which is free or require multiple names for a fee.
3. Follow the instructions for completing the required information to register
4. You will receive a confirmation email with your new domain name.

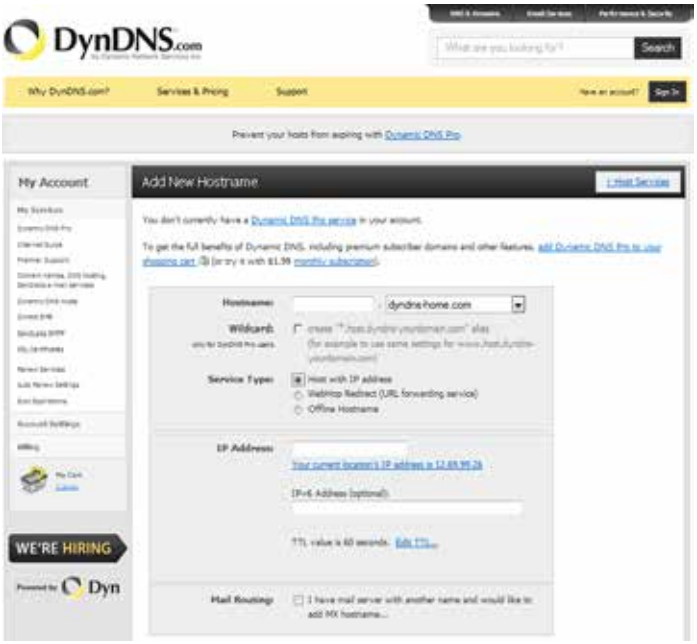
An example domain name might be adam@dyndns.com. You will need it to configure the DVR.

First obtain your Router DNS:

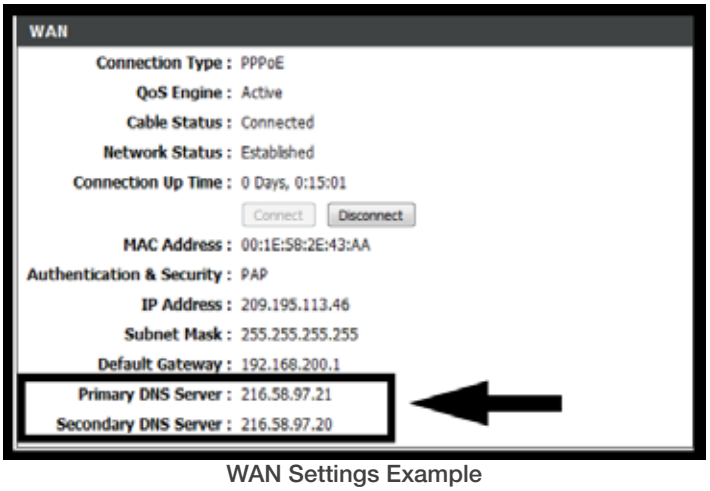
You need to get your DNS manually from your router.
You will need the Primary or Secondary DNS from your router for DDNS to function properly.

To obtain your Primary or Secondary DNS:

1. In your web browser, log in to your router using its Default Gateway address. NOTE: Refer to your router`s manual or software for login information. You can also get the Default Gateway on your PC by selecting Start>Run. Type CMD and press Enter. In the Command Prompt window type ipconfig and press Enter.
2. View its WAN settings. Write down the Primary or Secondary DNS address for use in the next step.



DynDNS.com Setup Screen



WAN Settings Example

HDD S.M.A.R.T.

S.M.A.R.T, or "Self-Monitoring, Analysis and Reporting Technology", is a hard disk technology that is incorporated into some hard disk drives.
A S.M.A.R.T HDD can analyze the drive's head, disc, motor, circuit operation, history and default security values via monitoring instructions in the HDD and the surveillance software. An alarm will automatically be sent to the user when a value is outside the scope of the security situation. Detection parameters for a Seagate HDD, for example, are divided into seven parts: ID detection code, Attribute Description, Threshold, Attribute Value, Worst, Date, and Status.

ID Detection Code

ID detection codes are not uniform; different manufacturers may assign varying attributes to an ID code number, or increase or decrease the quantity according to the detected parameter's quantity. For example, an ID detection code for Western Digital HDDs is "04", and the procedure is Start/Stop Count, but the procedure for the same code in a Fujitsu HDD is the "number of times the spindle motor is activated".

Attribute Description

Attribute Description: Name of detectable item. The manufacturer can increase or decrease the rates. As an ATA standard there are constant updates, sometimes different models of the same brand may be quite different, but it is a must to ensure that the major test items are specified by S.M.A.R.T. (although different manufacturers may have differing names, the essence of the monitoring is the same.)

1 Read Error Rate
2 Spin up Time
4 Start/Stop Count
5 Relocated Sector Count
7 Seek Error Rate
9 Power-on Hours Count
10 Spin-up Retry Count
194 Power temperatures
195 ECC on the Fly count
197 Current Pending Sector Count
198 Disconnection beyond repair
199 CRC cyclic redundancy check
200 Write Error Count

Note: Different manufacturers and different models have different attribute descriptions. The user does not need to know the exact meanings, and attribute detection values are good enough.

Threshold

This is specified by a manufacturer-calculated formula. If there is an attribute value lower than the threshold, this means the HDD has become unreliable and could easily lose data stored on it. The composition and size of reliable attribute values are different for different HDDs. It should be noted that the ATA standard only provides some S.M.A.R.T. parameters; it does not provide specific values. A "Threshold" value is determined by the manufacturer based on the product's features. Thus, results produced by the manufacturer's detection software are very different from testing software in Windows (such as AIDA32).

Attribute Value

Attribute value is the maximum normal value; the general range is from 1 to 253. Typically, the maximum attribute value is 100 (for IBM, Quantum, and Fujitsu) or 253 (for Samsung). Of course, there are some exceptions, for example, some models produced by Western Digital have two different attribute values, and the property value is set to 200 during production, but after that it is changed to 100.

Worst

The worst value is the largest non-normal value in the normal operation of an HDD. It is a value calculated for an HDD's cumulative running. It is constantly refreshed according to the drive's running cycle, and it is very close to the threshold. Whether or not the HDD is normal by S.M.A.R.T analysis is based on the comparison with the threshold value. The maximum value appears when using a new HDD, which continues to decrease with everyday use or if an error happens. Consequently, larger attribute values mean better quality and higher reliability and smaller values mean a greater possibility of failure.

Dates

Actual values of an HDD's detection of items; many of the values are cumulative values.

Status

The drive Status is current when all of the HDD's attributes are analyzed and compared by the S.M.A.R.T. system. It is also important information to judge if the HDD is healthy or not. There are three Status states: Normal, Alarm and Error, which are closely related to the Pre-failure/advisory BIT.

Caution!
When working with electrostatic sensitive devices such as hard disk or DVR unit, make sure you use a static-free workstation. Any electrostatic energy coming in contact with the hard disk or DVR can damage it permanently.

CAUTION!

RISK OF ELECTRIC SHOCK

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK. UNPLUG ALL POWER SOURCES, INCLUDING CAMERAS FROM THE DVR BEFORE REMOVING COVER. FAILURE TO DO SO CAN RESULT IN DAMAGE TO THE DVR OR ITS COMPONENTS AS WELL AS INJURY OR DEATH.

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of un-insulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock.

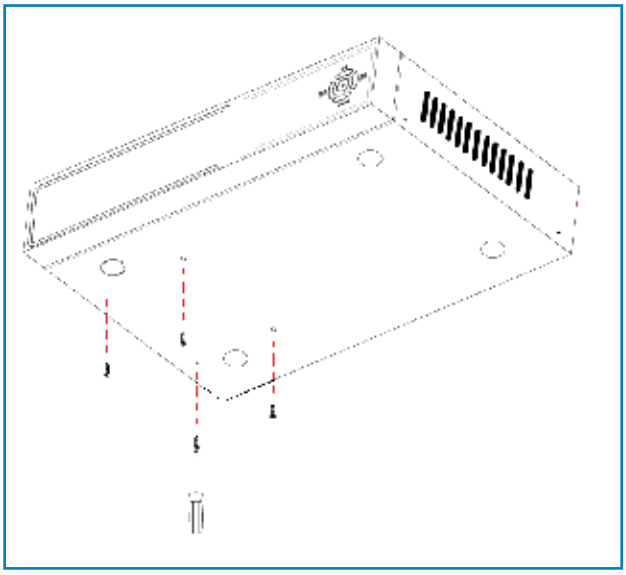
The exclamation point within an equilateral triangle, is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

Hard Drive Removal and Installation

To replace the hard drive in the DVR:
CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK. UNPLUG ALL POWER SOURCES, INCLUDING CAMERAS FROM THE DVR BEFORE REMOVING COVER. FAILURE TO DO SO CAN RESULT IN DAMAGE TO THE DVR OR ITS COMPONENTS AS WELL AS INJURY OR DEATH

1. Remove screws securing the cover of the DVR and remove cover.
2. Disconnect the hard drive power and data cables.
3. Remove old hard drive and replace with the new one.
4. Re-install the screws securing the hard drive to the bottom of the DVR.
5. Re-connect the hard drive power and data cables.
6. Replace the cover and screws. NOTE: Format hard drive per instructions in HDD MANAGEMENT section.

NOTE: The DVR Software supports up to a 2TB SATA hard drive



Hard Drive Remove/Install Screws from Below

Hard Disk Redundancy

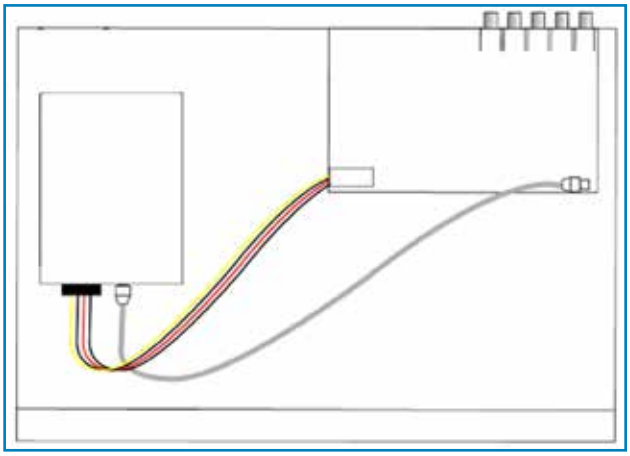
The hard disk drive (HDD) redundancy function can backup recorded files. The User can then retrieve files from a redundant HDD if a single HDD is damaged. This enhanced system data safety.
The HDD redundancy function performs a double backup of data from the designated channel to the HDD, so the DVR needs a standalone hard disk for the redundancy function to be effective.

Hard Disk Redundancy Configuration

Open the Main Menu and then the Storage menu to access storage configuration. Select an HDD as the redundant drive, and then click on Setting.
The Redundancy HDD must be an independent drive. The User can set several hard disks as a redundancy HDD group. Once an HDD is assigned as a redundant HDD, recorded data can be saved to both the main HDD and the redundant HDD.
The data on the redundant HDD should be automatically cycled; the cycle period depends on the recording data and the capacity of the redundant HDD.
Note: Make sure there are two HDDs, with at least one in the DVR. One is for read and write and the other for redundancy.

Channel Redundancy Configuration

The User can choose some or all of the channels to back-up. Go to Configuration→Record
and choose a channel, then check the “Redundancy” box.
Note: Data can only be saved to a normal read/write HDD if Redundancy is not enabled.



Hard Drive - Connected to Circuit Board

Hard Drive Format

NOTE: A new hard drive must be formatted after installation. Format per instructions in the HDD MANAGEMENT section of this manual.

Retrieve HDD Redundancy

The User can retrieve backup recordings from the back-up HDD when the main R/W HDD is damaged or data is lost. First, shut down the DVR and remove the damaged HDD, then restart DVR. Next, go to Main menu→Storage and set the back-up (redundant) HDD as the main read/write HDD, after which it can be searched.

Technical Specifications

Item	Device Parameter	Specification
System	Language	English/ Spanish/ French
	GUI	16 Bit Graphic menu (OSD Menu)
	Password	User password, Administrator password
Video	Video in	4 channel composite video input 1.0Vp-p, impedance 75Ω, BNC
	Video out	1 VGA, 1 BNC (CVBS), 1 HDMI
	Video display	4 channel: 1/4
	Video standard	4CH@D1 (704 x 480 w/30fps) Simultaneously
Audio	Audio input	1-ch audio input, impedance 600Ω, RCA
	Audio output	1-ch audio output, impedance 600Ω, RCA
	Record style	Audio video recorded simultaneously
	Audio compression	G711
Picture processing and storage	Picture compression	H.264
	Picture resolution	CIF/D1
	Audio style	ADPCM
	Video code rate	CIF: 192~1024 Kbps D1: 384~2048 Kbps
	Audio code rate	64Kbit/S
	Data storage	500 GB or 1 TB SATA HDD included, up to 2 TB capable
	Mouse	Mouse USB 1.1
	Data	USB 2.0
	Network interface	RJ45, 10M/100M
VGA	VGA output	Supports 1024 x 768 resolution
Software upgrade	USB	Supports USB firmware upgrade
other	Voltage input	AC:110~240V, to regulated 12VDC
	Power Consumption	6W without HDD
	Working temperature	14 °F to 122 °F (-10 °C to 50°C)
	Video impedance input	75Ω each channel
	Video output	1Vp-p CVBS signal

FAQ's

If your problem is not listed below, please call our toll-free number for more support. **Tech Services: 800-323-9005.**

Question: Why does DVR not work after starting? Why did the DVR stop working?
Answer:
- Check that the power adapter is plugged into the DVR properly
- Check the power source and all power cord connections are properly connected

Question: Why does the DVR reboot automatically? Or stop for several minutes after starting?
Answer:
- Check the supply voltage to be sure it is stable
- Bad track on hard drive or the hard drive is bad
- Instability of the front-end video signal
- High temperature, too much dust, bad DVR operating environment

Question: Why is there no video output on single, multi or all channels?
Answer:
- Check if the camera adaptor is properly connected
- Check the cable for connecting video input/ output in the back panel of DVR
- Insert the video source directly into the display device and check if they are causing the problem.
- Check the brightness of the picture and bring it back to its original default setting
- No video input signal or too weak

Question: What is the meaning of?
Answer:

	Indicates the channel is recording.
	Channel is capable of providing audio.
	Motion detected.
	Indicates a remote log in session is in progress.

Question: Why does DVR have problems with real-time images, such as bad image color or serious brightness distortion?
Answer:
- If PAL and NTSC are not correctly selected, the images will be in black and white and possibly a rolling screen.
- DVR is not compatible with monitor
- The video transmission distance (cable run) is too long
- Adjust the DVR color settings

Question: Why is there no audio sound when monitoring?
Answer:
- Check sound box or speaker functions. Also check possible short circuit.
- Audio source may be connected to the video channel. You can click to full-screen to check.
- The hardware of DVR is defective
- Cameras are not audio capable
- Speakers need to have an amplifier
- Channel being monitored is not connected to an audio camera

Question: Why is there no audio when playing back?
Answer:
- Check to see that the audio settings for the channels are correct.
- Audio is off in record menu

Question: Why is my system time not correct?
Answer:
- Wrong setting or user did not click Apply to confirm

Question: Why doesn't motion detection work?
Answer:
- The setting of motion detection area is not correct
- Sensitivity is too low

Question: Why do I have no disc or disc error?
Answer:
- The data being downloaded exceeds the capacity of backup device
- The backup device is incompatible
- The backup device is damaged

Question: Why can't I log in over the Internet?
Answer:
- Check the network to see if it is connected. Check if LINK or 100M LED is displayed normally on the panel; use ping xxx.xxx.xxx.xxx (DVR IP) to check if the Internet is linked properly.
- Make sure you are running Windows 7, Vista or XP operating system and Internet Explorer 8.0 - 11.0

Troubleshooting

Error	Possible Cause	Solutions
System is not receiving power or is not powering up	Cable from power adapter is loose or is unplugged	• Confirm that all cables are connected correctly • Confirm that the power adapter is securely connected to the back of the unit

	Cables are connected, but system is not receiving sufficient power	• Confirm that the system is powered on (LED indicators on the top should be ON)
		• If the unit is connected through a power bar or surge protector, try bypassing the bar and connecting the power directly to the wall outlet
		• Confirm that there is power at the outlet
		  • Connect the power cable to another outlet
		  • Test the outlet with another plugged device

Hard drive is not detected by the system	Hard drive cables are loose or not properly connected	• Remove the housing and check that hard drive cables are firmly connected
		• Open the housing and install a 2.5 SATA hard drive
Mouse not detected by system	Mouse cable is not connected or is not firmly connected to the system	• Firmly connect the mouse cable to the USB Mouse port (not the USB Data port) on the back panel.
	System needs to be reset	• Power off the system (Turn power off by removing DC plug). Firmly connect a USB mouse to the USB Mouse port on the back panel of the system. Power on the system.
There is no picture on selected channels/camera picture is not being displayed	Camera cables are loose or have become disconnected	• Check the camera video cable and connections • Disconnect and reconnect the cable at the system and at the camera • Try moving the camera to another channel or use another cable
The image on the DVR appears but does not have sound	Audio cables are loose or have been disconnected	• Check the AUDIO IN connection to the DVR
	Audio channels are disabled insert check the system settings	• Check the Audio Configuration
	Volume on external speakers (not included) is low or off	• Increase volume on external speakers (not included)
The system beeps at startup	The beep at startup is normal	

Warranty

PRODUCT LIMITED WARRANTY

BRK Brands, Inc., ("BRK") the maker of First Alert® brand products warrants that for a period of one year from the date of purchase (the "Warranty Period"), this product will be free from defects in material and workmanship. BRK, at its sole option, will repair or replace this product or any component of the product found to be defective during the Warranty Period. Replacement or repair will be made with a new or remanufactured product or component. If the product is no longer available, replacement may be made with a similar product of equal or greater value. This is your exclusive warranty.

This warranty is valid for the original retail purchaser only from the date of initial retail purchase and is not transferable. In order to obtain warranty service, you must keep the original sales receipt and proof of purchase in the form of the UPC code from the package. BRK dealers, service centers, or retail stores selling BRK products do not have the right to alter, modify or any way change the terms and conditions of this warranty.

WARRANTY EXCLUSIONS

Parts and Labor: 1 year limited (warranted parts do not include bulbs, LEDs, and batteries)

This warranty does not apply to bulbs, LEDs, and batteries supplied with or forming part of the product.

This warranty is invalidated if non- BRK accessories are or have been used in or in connection with the product or in any modification or repair is made to the product.

This warranty does not apply to defects or damages arising by use of the product in other than normal (including normal atmospheric, moisture and humidity) conditions or by installation or use of the product other than in strict accordance with the instructions contained in the product owner's manual.

This warranty does not apply to defects in or damages to the product caused by (i) negligent use of the product, (ii) misuse, abuse, neglect, alteration, repair or improper installation of the product, (iii) electrical short circuits or transients, (iv) usage not in accordance with product installation, (v) use of replacement parts not supplied by BRK, (vi) improper product maintenance, or (vii) accident, fire, flood or other Acts of God.

This warranty does not cover the performance or functionality of any computer software included in the package with the product. BRK makes no warranty that the software provided with the product will function without interruption or otherwise be free of anomalies, errors, or "Bugs." This warranty does not cover any costs relating to removal or replacement of any product or software installed on your computer.

BRK reserves the right to make changes in design or to make additions to or improvements in its products without incurring any obligations to modify any product which has already been manufactured. BRK will make every effort to provide updates and fixes to its software via its website. This warranty does not cover any alteration or damage to any other software that may be or may become resident on the users system as a result of installing the software provided. This warranty is in lieu of other warranties, expressed or implied, and BRK neither assumes nor authorizes any person to assume for it any other obligation or liability in connection with the sale or service of the product. In no event shall BRK be liable for any special or consequential damages arising from the use of the product or arising from the malfunctioning or non-functioning of the product, or for any delay in the performance of this warranty due to any cause beyond its control.

BRK does not make any claims or warranties of any kind whatsoever regarding the product's potential, ability, or effectiveness to prevent, minimize, or in any way affect personal or property damage or injury. BRK is not responsible for any personal damage, loss, or theft related to the product or to its use for any harm, whether physical or mental related thereto. Any and all claims or statements, whether written or verbal, by salespeople, retailers, dealers, or distributors to the contrary are not authorized by BRK, and do not affect this provision of this warranty.

BRK's responsibility under this, or any other warranty, implied or expressed, is limited to repair, replacement or refund, as set forth above. These remedies are the sole and exclusive remedies for any breach of warranty. BRK is not responsible for direct, special, incidental, or consequential damages resulting from any breach of warranty or under any other legal theory including but not limited to, loss profits, downtime, goodwill, damage to or replacement of equipment and property and any costs of recovering, reprogramming or reproducing any program or data stored in or used with a system containing the product accompanying software. BRK does not warrant the software will operate with any other software except that which is indicated. BRK cannot be responsible for characteristics of their party hardware or software which may effect the operation of the software included.

Except to the extent prohibited by applicable law, any implied warranty of merchantability or fitness for a particular purpose is limited in duration to the duration of the above Warranty Period. Some states, provinces, or jurisdictions do not allow the exclusion or limitation of incidental or consequential damages or limitations on how long an implied warranty lasts, so the above limitations or exclusion may not apply to you. This warranty gives you specific legal rights, and you may also have other rights that vary from state to state, or province to province, or jurisdiction to jurisdiction.

OBTAINING SERVICE

If service is required, do not return the product to your place of purchase. In order to obtain warranty service, contact the Consumer Affairs Division at 1-800-323-9005, 7:30 a.m. – 5:00 a.m. Central Standard Time, Monday through Friday. To assist us in serving you, please have the model number and date of purchase available when calling.

After contacting the Consumer Affairs Division and it is determined that the product should be returned for Warranty Service, please mail the product to: BRK Brands, Inc., 3901 Liberty Street Road, Aurora, IL 60504-8122.

First Alert®

©2014 BRK Brands, Inc.
a Jarden Corporation Company (NYSE:JAH)
3901 Liberty Street Road, Aurora, IL 60504-8122
Phone: 630-851-7330 Tech Services: 800-323-9005
www.FirstAlert.com / www.brkelectronics.com
M08-0513-000